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ORIGINAL ARTICLES.

LARYNGECTOMY.*

BY N. B. CARSON, M. D., of St. Louis.

New growths of the larynx are very common, and may be either benign or malignant. F. Simon counted, up to 1889, 12,297 cases of laryngeal tumors, 10,745 of which were benign and 1,550 malignant. Eighty-eight per cent. of tumors of the larynx are therefore benign, and twelve per cent. of the total number malignant. (V. Bergmann, "Surgery," Vol. II, p. 225.) This I find is about the average percentage according to the statistics of others.

While both the benign and malignant are alike interesting to the surgeon, I shall treat only of the malignant growths, for the reason that my experience is limited to them.

Malignant tissues of the larynx include both sarcoma and carcinoma, the proportion of the one to the other being as 1 to 12. (Sendzick.) Up to 1894, Sendzick collected 452 operated cases of carcinoma and 50 cases of operated sarcoma. (V. Bergmann, Vol. II, p. 223.) He discovered a very decided influence of sex in these cases, in sarcoma the proportion being two males to one female, and in carcinoma six males to one female.

For this condition there is only one treatment, and that is surgical; and whether that be partial or complete removal, depends altogether on the extent of the involvement.

When we see the death rate for laryngeal tumors diminished from 44 to 8.5 per cent., and those remaining well over three years increased from 7 to 16 per cent., while those remaining without recurrence less than three years has been increased from 14 to 33 per cent., who can doubt the propriety of surgical treatment in these otherwise hopeless cases.

With the improved methods of diagnosis and earlier operations, I am sure the mortality will be still further diminished, and the longevity of those operated upon increased.

To improved technique and earlier diagnosis are to be credited the improvement. Keen gives as the cause of mortality: (a) weakness of the

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patient by reason of the disease, the poor circulation of the blood, and the entrance of septic discharges from the diseased larynx into the lung before operation; (b) shock, including hemorrhage, during operation; and (c) after the operation septic pneumonia, due to the aspiration of infected wound fluids. And to these may be added, according to others, general instead of local anesthesia, and the inhibitory action, through the superior laryngeal branch, of the pneumogastric nerve of the heart.

The first cause can be in a measure obviated by early operation and the discontinuance of efforts to confirm the diagnosis by the microscope and the administration of anti-specific remedies, which latter is often fatal through waste of time and the damage inflicted to the nutrition of the patient. I am sure that this was the cause of the death of my third case, as he failed decidedly during the time so employed.

McKenzie, J. N., says: "Search the literature of today (*New York Med. Jour.*, September 8, 1900), alike in text-book and periodical, and we see how comparatively little reliance is placed upon clinical signs and symptoms, and how quickly the microscope is invoked, and often with disastrous results." "The removal of the piece for microscopic examination too often is only the beginning of the end." In V. Bergmann, "Surgery," Vol. II, p. 289, we read: "The microscopical examination is of the greatest value in doubtful cases;" and lower down on the same page we read: "An examination of this sort, however, is not always positive, as shown by a number of cases in which a diagnosis of benign and malignant growths was made by different examiners, all using one and the same piece of tissue." "The surgeon of today discriminates with marvelous accuracy (with the naked eye) between the different varieties of benign and malignant growths, and we should encourage a like amount of skill in the diagnosis of laryngeal tumors. There is, unfortunately, no solitary unequivocal symptom or laryngoscopic sign of cancer. The diagnosis must be made by grouping together, when present, both the local and general phenomena." McKenzie gives three methods which must be resorted to: "(1) The naked-eye method, or diagnosis by direct inspection, supplemented by clinical phenomena. (2) Thyrectomy. And finally (3), the microscope. Of the first two methods, the second is often included in, and therefore auxiliary to, the first.

"But suppose, after weighing carefully all the facts of the case in our possession, a reasonable doubt remains as to the diagnosis, shall the next step be the removal of a portion of the diseased structure for examination? In the face of all authority to the contrary, I say, emphatically, *no*. Before even considering such a proposition (if it be considered at all), the suspected growth should be examined from every point of view, for in this manner alone can we give the naked-eye method its full measure of usefulness.

"This is best accomplished by the second method (thyrectomy), or,

if necessary, even more extensive external division of the tissues of the neck. Thyrectomy is always justifiable in such cases when laryngoscopic examination either leaves a reasonable doubt as to its true nature, or manifestly fails to define the exact territory occupied by the disease."

I have quoted so extensively for the reason that it bears out so perfectly my experience. In my first case, valuable time was lost and the destructive process continued while the effort was being made to determine positively the exact nature of the disease. In the second case, much valuable time was lost and several months elapsed because the first laryngoscopist failed to make a diagnosis. Being convinced of the malignant nature of the disease, he removed a piece for microscopical examination, but it failed to show malignancy. A week later he removed another piece, which confirmed the macroscopic diagnosis, but valuable time had been lost. In the meantime the cervical glands became involved, and were removed at the time of the operation.

In my third case, I am quite sure the fatal result was influenced by the efforts to determine the nature of the growth, as the patient failed decidedly during that time.

While I have personally seen no unfavorable results from the removal of parts of the tumor for examination, I must agree with McKenzie that thyrectomy is, on the whole, much the safest and surest method to determine the true nature of the growth, especially as the microscope is so uncertain, of which there is ample proof, and the laryngoscopic picture does not define the extent of the parts involved.

This has been so in my three cases, in which the extent of the involved tissue was much more than was shown by the laryngoscopic picture. So that I think with more frequent resort to exploratory operation the mortality will be reduced, and the longevity after laryngectomy, either partial or complete, increased.

By early diagnosis Keen's first source for high mortality will be overcome. By the improved technique of the Roetter operation the danger from shock has been decidedly reduced.

By the closing of the wound and shutting off the pharynx and esophagus, thus preventing the discharges of these infected "wound fluids, the mortality is still further reduced." As to local anesthesia I have no personal experience, and therefore I cannot speak.

But from my experience in other cases where I have used it and where I have seen it used, I still favor and use chloroform, as it certainly affords more comfort both to the patient and operator.

Surgeons abroad use local anesthesia much more frequently than American surgeons. Kocher, according to Hartley, has probably used it more extensively than anyone else for the purpose of preventing cough, stilling hemorrhage and eliminating pain.

Both Kronlein and Kocher believe that the diminished reflex irritabil-

ity of the trachea and of the bronchi seen in general anesthesia (an additional disadvantage in the use of ether, which does not apply to chloroform), is the increased tracheal and bronchial secretion. This is also eliminated by local anesthesia. The use of cocaine upon the mucous membrane of the larynx has other advantages, in that it defines more precisely the limits of the growth. (Butlin.) And by its anesthetization diminishes the tendency to a sudden reflex inhibition of the heart through the superior laryngeal branch of the pneumogastric nerve. (Hartley.)

Another cause given for the reduced mortality is the Trendelenburg-Rose posture. By this posture the aspiration of blood and other fluids is avoided. It is also claimed that the preliminary tracheotomies and the use of the tampon canula can thus be done away with.

Hartley thinks that the use of the tampon canula increases rather than decreases the dangers of aspiration pneumonia. As I use general anesthesia I favor the use of the canula as rendering the anesthetic less dangerous, and aiding the posture in preventing the aspiration of fluids and by keeping the anesthetist at a distance from the field of operation, thus preventing infection.

There seems to be a very decided difference of opinion as to the advisability of preliminary tracheotomy. Many favor it, while others deem it unnecessary. In my first case a preliminary tracheotomy was done, during my absence from the city, by one of my assistants on account of a sudden attack of suffocation. This operation was done at night. The canula was not well placed and came out soon, and was not used during the subsequent operation. The advantages claimed for this step are that it fixes the trachea and thus prevents the drawing upon the sutures and tearing them out, fixing the divided end of the trachea into the wound, and also that it allows the plugging up of the upper end of the trachea and so prevents the aspiration of fluids.

By the use of the Gerster canula and the Trendelenburg-Rose posture, and the drawing of the trachea upwards and forwards, the preliminary tracheotomy is unnecessary and only adds to the chances against the success of the operation.

Davis says: "While in many cases tracheotomy would be easy of performance and quick in healing, in others (particularly for existing carcinomatous disease) it may in itself prove fatal, or leave the parts in quite unfavorable condition for a subsequent removal of the larynx."

Case 1.—Mrs. E., sixty years, German, housewife, city; entered the hospital February, 1887, on account of laryngeal trouble. Patient gave a good family history. No specific history.

Physical examination, slight build, thin, showing loss of flesh; skin shriveled, cachexia marked; lungs, heart and other organs healthy. Laryngoscope showed destructive process in both true and false cords, with thickening of surrounding parts. To make certain the diagnosis of

malignancy, antispasmodic remedies were administered. Under this treatment the patient's general condition failed. Several days before the operation, and during my absence from the city, the patient was seized with a difficulty in breathing during the night, and one of my assistants opened the trachea. The tube, for reasons stated above, was not well placed, and came out the next day, and the urgent symptoms having been relieved, it was not replaced. In April the larynx was removed, under chloroform, by a straight incision from just above the hyoid, joining the tracheotomy incision below. The larynx and upper portion of the trachea were cleared and the tissues held aside. The trachea was divided and turned forward and stay sutures placed and a canula introduced; a rubber tube was attached to the canula, and gauze was packed to prevent the insufflation of blood and discharges, and the anesthesia continued. The larynx was then freed from the esophagus and pharynx. Noticing, after the removal of the larynx, that the opening in the upper end of the esophagus and the pharynx came well together spontaneously, I determined to close them with sutures and then suture the skin, first having attached the trachea into the lower end of the incision, thus avoiding the large, slow healing, granulating wound, which was the custom at that time.

For two or three days she was kept in the sitting posture and fed by the rectum. On the third day she was fed by a tube passed into the stomach through the nose. Within a week she was able to talk enough to make the nurses and others around her understand her wants. She made an uneventful and rapid recovery, and left the hospital in good condition and remained well until late in the following August, when she died from heat stroke.

I did in this case, as you will note, practically the operation which subsequently became the accepted operation for the removal of the larynx.

Case 2.—Mr. S., married, age forty-eight, Missouri, bricklayer; entered the hospital March, 1904, on account of carcinoma of the larynx. Family history good. Habits and also previous history good. About nine months before entering the hospital had grip; since that time noticed voice husky, which had been steadily increasing. About six months ago it began to pain him to swallow, felt raw and rough. Steadily became worse. About three months ago consulted Dr. Loeb, who put him on antispasmodic remedies, and removed a piece for examination, as noted above. General condition of the patient good, and no cachexia present when he entered hospital. Several days after admission to hospital, under chloroform, laryngectomy, after Roetter's method, with patient in Trendelenberg-Rose posture, was done. Patient made an uneventful, rapid recovery, and is now steadily gaining flesh. Fourth day after the operation spoke to his wife one or two words. At present can talk some.

Case 3.—Mr. E., widower, German, fifty-five years, city, painter. Family history good, habits fair. Previous history, had some pulmonary affection when a young man, from which he apparently recovered. About a year and a half ago had grip. As long as he can remember has had a peculiar voice, there always seemed to be something in his throat. Trouble seemed to be in the right side and in front. For the past year his voice has been steadily failing until he entered the hospital, when he could speak with great difficulty and only in a whisper. For a month before he came to hospital it had been quite painful, especially on swallowing. Pain seemed most severe on the right side. Had not noticeably lost flesh; was not cachectic.

Physical examination, fairly well nourished. Heart, liver and other organs healthy. Some changes on percussion, and auscultation (slight) on the left side at apex more than on the right side, indicating old quiescent tubercular foci. Sputum examination, a few tubercle bacilli.

Laryngeal examination showed growths on right cord anteriorly with thickening of the epiglottis and neighboring parts. Piece of tumor secured by Dr. Loeb—examination of one section made by Dr. Teidemann, with negative result. A later section removed by Dr. Loeb was examined by Dr. Bolton, who, after a most careful examination of many sections, pronounced it malignant.

Urinary analysis negative.

Upon the result of this examination by Dr. Bolton, Dr. Elsworth Smith agreeing that the condition of the lungs was not an obstacle, early in May I operated, doing again the Roetter operation, with the Trendelenberg-Rose posture, under chloroform. The patient did well for three days, when he seemed much prostrated. He then again seemed to improve somewhat until the morning of the eighth day, when he had an attack of dyspnoea, which rapidly increased until his death, two or three hours later. The wound healed well. There was no sepsis.

INTUSSUSCEPTION.*

BY CHARLES H. DIXON, M. D., of St. Louis.

LECTURER ON CLINICAL SURGERY, MEDICAL DEPARTMENT, WASHINGTON UNIVERSITY.

This is one of the most frequent causes of intestinal occlusion, and has received but little attention. Fitz, in his statistics of acute intestinal obstruction, gives this the cause in 31.5 per cent. of 295 cases. Gibson (1) says in one thousand operations for acute intestinal obstruction, 187 were for intussusception, ranking next in frequency to hernia. There are two forms, a physiological and a pathological. The physiological form is distinguished from the pathological by the non-inclusion of the menestery and the absence of any pathological changes

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in the intestinal wall and peritoneum—therefore it is the latter form with which we have to deal.

It usually occurs singly, and in any part of the intestinal tract, but is found most frequently in the most movable portion, and is usually of a descending form, although a few cases of the ascending type are on record. The different forms of invagination depend on what portion of the gut is implicated, but the great groups are, enteric, colic and ileocecal. It usually occurs in early childhood. Fitz says 34 per cent. occurs under one year and 56 per cent. under ten years. Gibson states that in all cases of intestinal obstruction under one year the cause is due to intussusception. The majority of cases occur in the male, the ratio is about $1\frac{1}{2}$ to 1. Leichtenstern (2) claims invagination is due to a paresis of the bowel, the increased peristalsis forcing a normally contractile portion into a paralytic portion. Nothnagel, on the other hand, says it is caused by a spasm of the intestine—a spasmodic contraction of the intestine causing the distal end to be drawn up over the invaginated portion.

The direct cause may be due to the neoplasms of the small intestines, benign or malignant, foreign bodies, ulcers, strictures, enteritis, dysentery and trauma. Baker (3) reports a case of an annular carcinoma of the sigmoid flexure causing invagination. Osler says of 103 cases no cause could be assigned in 42, while in the remaining diarrhoea or constipation had existed. Individual cases had occurred in the course of typhoid fever, pregnancy, variola, gastro-enteritis after use of cathartics and after operation for incarcerated hernia. Pitchford reports a case following convalescence from typhoid fever—autopsy showing nine invaginations occurring in the small intestines, he failed to state whether they were of a pathological or physiological form. Rigby (4) reports seven cases of acute intussusception in the London Hospital in nine days occurring in children of good physique in which there was vigorous peristalsis, the majority of cases occurring right after Christmas. He attributes the cause in these cases due to over-indulgence in the festivities. Owen (5) speaks of a child *æt.* seven months operated on for invagination who did well for twenty-four hours, when symptoms reoccurred, calling for second operation, the intussusception was relieved, but the child failed to rally, and died twenty-four hours after—character of operation not stated. Dobson (6) reports thirteen cases of invagination of Meckel's diverticulum in which the removal of the diverticulum was required before the invagination could be reduced. Terry (7)—similar case of boy at twelve. Moore and Abbott (8) report two cases. Traverse (9) reports one case. Bullock (10) reports a case of invagination due to lumbricoids. Von Mikulicz (11) reports a severe case in which the cecum protruded from the anus.

The most prominent symptoms of intussusception are suddenness of attack, patient in apparent good health, pain, nausea and vomiting.

tumor, hemorrhagic evacuations, meteorism and tenesmus. These symptoms are largely due to circulatory disturbances, the result of the incarceration and subsequent compression of the mesentery. In the physiological variety, where no invagination of the mesentery occurs, most of the symptoms are wanting. Although the subjective and objective signs of intussusception are more characteristic than those of any other form of intestinal obstruction, the diagnosis is not always easy. Hemmeter (12) gives the following as the most valuable factors upon which to base a diagnosis: "Sudden onset of intense pains during perfect health, pains may be continuous or intermitting, nausea and vomiting, which is fecal in only one-eighth of all cases, tenesmus, evacuation consisting of blood and mucus, tumor (sausage shape), suppression of fecal evacuation and flatus, lastly, discharge of purulent and gangrenous shreds of tissue." In the chronic form the diagnosis is much more difficult. Ruffin's statistics show an error of nearly 50 per cent. in fifty-five cases, the tumor is the only definite factor, and when it can be palpated the diagnosis is greatly facilitated.

Purely medical treatment has proven successful in only a limited number of cases, but whether due to this or to spontaneous resolution is questionable.

Medical treatment may be applied from three directions: by mouth as diet, purgative opiates, atropine-gastric lavages; by rectum, as distension with gas or water, replacement of intussusception by repository, intubation of colon, electricity, opiates, rectal feeding, salt water; by application to abdominal walls, as electricity, massage application of heat and cold, puncture of the intestines to relieve gas, injection of opiates, salt water. We might add to this list general anesthesia.

Of the first form, purgatives in this condition should never be resorted to; opiates, although they may relieve pain and pitiable vomiting, should be used with the greatest caution. Atropine has been used successfully in some cases. E. Vidal (13) advocates injection of glycerine extract of pig's intestine, both before and after operation, claiming it lessens stercoræmic infection. Lavages of stomach can only be a palliative measure, but we cannot see how *a priori* could lead to a cure. Forced distension with gas or water per rectum can only be considered as not only non-available, but highly dangerous. Who can tell the amount of damage done to the intestinal wall following an invagination? If the constriction is only of a few hours' duration there may be such changes have taken place from compression of the blood supply in the mesentery that the walls are much weakened and even ulceration may have ensued. Intubation of the colon can be done, but it is an extremely hazardous procedure. Salt water injection has a tendency to increase peristalsis, and in that manner may relieve the condition, and under the same principle an injection of a solution of fresh beef-gall may be used. The use of electricity as applied by Boudet may be ad-

missable, but whether it is due to the current (galvanic) or to increased peristalsis from the salt water injection is questionable. He claims fifty-three cases cured out of seventy cases of intestinal obstruction. Hem-meter (12). Action of opiates the same here as when used elsewhere. Rectal feeding is highly efficacious in high occlusion, not as a curative, but as a general systemic measure. Massage is contraindicated in all cases of occlusion except in some cases of fecal impaction. Application of heat and cold may be done to relieve some of the symptoms. Puncture of the intestine should be done with extreme care and by an experienced person. Erdmann (14) reports twelve cases, ten operations, five recoveries and five deaths, three of the latter operations were done as a dernier resort, all mechanical means having been exhausted; in two cases resections had to be made for gangrene, and one case died septic seven days after operation; of the fatal cases three were moribund when operated on and all were over two and one-half days' duration. Rigby (15) strongly advocates early operation, the moment the invaginated portion becomes gangrenous the mortality rises from 50 per cent. to 100 per cent. The inflation of gas or water is wasting time. Spontaneous healing may take place and occurs mostly in acute cases, but cannot be relied upon; in such cases various lengths of intestines have been sequestered, varying from a few inches to four and one-half feet. Erdmann (16) lays particular stress on the early surgical interference, that text-books should be rewritten on this subject and particular stress laid on the symptoms of suddenness of attack, pain and blood or bloody mucus evacuations and not on the presence of any tumor, especially of a sausage shape, it is more apt to be round or modulated and moderately movable. In over 60 per cent. of twenty-six cases operated on by him no tumor was present.

I report herewith six cases which were as follows:

M., æt. six months, male child, in good health, attack of vomiting, pain and tenesmus coming on suddenly, evacuation of bloody mucus; saw child two days after attack; abdomen slightly distended; tumor in right inguinal region extending into hypochondriac; operation found ileocecal invagination reduced; some ulceration; child died in twelve hours.

G., æt. eight years; while playing was taken with severe pain in the region of umbilicus, bloody evacuation, tenemus, tumor in umbilical region; under administration of anæsthetic reduction took place.

H., æt. nineteen years; saw two days after attack of pain in umbilical region, accompanied with vomiting, tenemus and evacuation of bloody mucus, slight elevation of temperature, tumor palpated in the right inguinal region; he had been given a large high enema, and under examination the reduction took place.

McF., æt. eight; was called to see the child after it had been suffering over two weeks with the usual symptoms; large tumor was easily

palpated and he was operated on and an invaginated condition of over fourteen inches found; this was easily reduced; there was no great change in the walls of the intestines or mesentery; fourteen months after, while in good health and playing, was again taken suddenly with severe pain in stomach, vomiting, tenismus and slight mucus evacuation. On account of this attack being similar to previous one, its mother at once carried him to the hospital and sent for me. The tumor was easily palpated and child operated on and invagination of over nine inches found and reduced, and the mesentery was folded over and stitched. There has been no further trouble, and it is now five years since last operation.

D. M., æt. fourteen years, female; five months ago while in good health was taken with severe pain in abdomen, vomiting, mucus evacuation; pain lasting three days, no fever; then was apparently in normal health, similar attacks occurring, first at intervals of about four weeks until present time; one attack occurring March 5, 1904, continued with the usual symptoms for four days; there was also a marked swelling in abdomen; one week later she was in normal health. From March 12th to June 5th she has had a number of attacks, at intervals of two weeks at first, till now she is having them every few days. I saw her in two attacks; there was painful vomiting, bloody mucus evacuation, and a large tumor in the umbilical region was easily palpated, but at each time while manipulating the invagination could not only be felt reducing, but the gurgling noise similar to reduction of hernia was discernible. In several of these attacks she was given large doses of atropine. On June 5, 1903, she was taken with a severe attack, and a tumor apparently about nine inches long was easily palpated in the umbilical region with a central portion of greater hardness. She had been given no atropine during this attack, and an operation having been decided on previously, if she should have another attack, was at once prepared for operation. On opening the cavity a large invagination of the ileum was found, measuring about twenty-two inches; after reducing it two growths were found in the invaginated portion, about six inches apart, about the size of a large olive. They were excised and wound closed. There was no interruption in healing except a small stitch abscess. Dr. C. Fisch gives the following result of the examination of the growths:

"The tumors that you removed from the invaginated portion of the small intestines of a young girl at the Bethesda Home, and that you submitted to me for examination on June 6, 1903, proved to be poly-pous outgrowth of the mucosa, consisting mostly of typical gland tissues, and therefore appearing of a very soft consistency. They may be called polpi or papillomata, or better and more definitely, fibroadenoma papillare. Of course, these tumors were not of a malignant character, but supposedly, the consequence of chronic catarrhal condition of the intestinal mucosa."

C., æt. thirteen years; was taken with severe pain in right inguinal

region accompanied with vomiting and tenesmus, with slight bloody mucus stool, no temperature, swelling quite easily palpated, after high enema a gurgling sound, as she termed it, was heard; tumor disappeared and after large stool pain ceased. It was thought at first that she had appendicitis.

In reference to a reduction of the invagination, care should be taken not to produce any traction on the proximal end, as it only tends to increase the restriction, but gentle and firm pressure against the distal end of the invaginated portion; and it is remarkable how easily by this means the reduction is often accomplished. If ulceration or gangrene has resulted from strangulation, resection and anastomosis should be done at once.

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SUPPURATIVE DISEASE OF THE ACCESSORY NASAL CAVITIES.

BY W. B. SHIELDS, M. D., of St. Louis.

Suppurative diseases of the nasal cavities are recognized as being more common than was once thought, this on account of the improved methods of diagnosis and more thorough investigation by many competent rhinologists. As we know the four nasal accessory sinuses, the frontal, ethmoidal, sphenoidal and antrum of Highmore are in close proximity, and, in fact, some anatomists regard the sphenoidal sinus as merely a much enlarged posterior ethmoidal cell. It is not uncommon to find a suppuration of the antrum of Highmore accompanying ethmoidal suppuration on account of the opening of the ethmoidal cells being above the antral opening in the nose and gravity not infrequently carrying pus into the antrum of Highmore. Of course, one can readily conceive that chronic suppuration of the frontal sinus, a rather rare disease, would be apt to be followed by more or less implication of the anterior

ethmoidal cells lying below the frontal sinus opening into the nose. Again the close proximity of the posterior ethmoidal cells and the sphenoidal sinus, which is located in the body of the sphenoid bone and not infrequently extending into the Basilar process of the occipital bone, would in case of suppurative disease of the posterior ethmoidal cells be more or less liable to participate in the suppurative process.

We have all had patients consult us for so-called catarrh, which sprays and douches would relieve but not cure, especially cases which would complain of dripping into the back part of the throat. The prompt diagnosis of post nasal catarrh, which is made in this class of cases, is, in my opinion, quite incorrect, as I am of the opinion that the trouble in the majority of these cases is a suppurative process more or less severe going on in some one of the nasal cavities. I believe that suppuration of the accessory cavities is more common in our country than formerly on account of the greater density of population. I am of the opinion that most of these troubles are infection from inhalation of dust laden with micro-organisms, especially the influenza bacillus. The connection between eye diseases and chronic ethmoiditis and sphenoiditis is also being more recognized by oculists every day on account of the intimate relation of the eye and ethmoidal and sphenoidal cells. Many cases have been reported of so-called eye strain accompanied by headache and not relieved by glasses, and which, upon more thorough investigation, have been found to be due to retention empyema of ethmoidal or sphenoidal cells. One finds not infrequently a slight elevation of temperature at some time during the day in these cases, which should excite a suspicion of infection from the nose. My experience leads me to believe that suppurative ethmoiditis is more frequent than suppuration of the antrum of Highmore, although this view is at variance with those of older men. I think that not infrequently we find the antrum disease is secondary to the ethmoidal on account of the relative anatomical arrangement of their cavities. This is more apt to occur than the reverse. Chronic frontal sinusitis is relatively rare, but I believe chronic sphenoiditis is more common than was once thought to be.

I have now under treatment a case of suppurative disease of the ethmoidal accompanied by chronic suppurative sphenoiditis. This patient had the recurring pains at the base of the brain and in the occipital region, which are pathognomonic of sphenoidal disease, and, on doing posterior rhinoscopy, I could see a large amount of pus issuing from the sphenoidal region. No pus could be found on anterior rhinoscopy. In this case I took away the entire middle turbinate, found pus in the ethmoidal cells, which I curetted, intending opening the sphenoidal cells later on. The patient was so much relieved that I did not find it necessary to open the sphenoidal cells, the mere removal of the middle turbinate being all that was necessary as it gave full drainage. The pus accumulated only once since the operation,

accompanied by headache at base and posterior part of occiput, but was relieved upon using measures to allow the pus to escape. In this case I was surprised to find the great relief resulting merely by establishing free drainage, although, in addition to removing the turbinate bone, I probed the sphenoidal cavity several times, which may have removed hard masses from the sphenoidal opening and in that way may have assisted drainage.

The differentiation of ethmoiditis from frontal sinusitis is in many cases most difficult, as not infrequently ethmoiditis is accompanied by frontal pain, and one can only find out the true location of the disease after the most painstaking effort. Transillumination is a valuable aid in making diagnosis, as there is no darkness when the trouble is ethmoidal. Sphenoidal suppuration can generally be differentiated from ethmoidal by the location of pain in the back of the head, in the occipital region, and the pus coming from the sphenoidal region on making posterior rhinoscopy. I am of the opinion that many cases of so-called sick headache were sinus trouble not diagnosed on account of our lack of knowledge in the past of these conditions.

CLINICAL REPORT.

A PLEA FOR MORE CARE AND ATTENTION TO EAR, NOSE AND THROAT IN ALL ACUTE INFECTIOUS DISEASES, WITH REPORT OF A SINGLE CLINICAL CASE.

BY DR. CHAS. J. ORR, M. D., of St. Louis.

In reporting this single case I wish to call attention to the awful sequelæ which occasionally follow acute infectious diseases, and, while not presenting anything new, desire to make an appeal for greater care in the treatment of all such cases, and certainly all physicians should be interested in this subject.

Many individuals when stricken with any one of this group of diseases give an absolutely negative history of any previously observed disease of ear, nose or throat; others have noticed some abnormal condition, most frequently naso-pharyngeal catarrh, and often will tell you of evidence showing the presence of an inflammation of the eustachian tube and middle ear. Whether there is any history or physical signs of previous disease of these parts, in all acute infectious diseases mild preventive treatment is indicated.

When we consider the causes we find they always result in a catarrhal condition of the mucous membrane of a part or the entire tract of the hearing apparatus. Clinically, we can divide all such cases into two classes: First, inflammations of purely catarrhal type, in which the secretions and discharge are mucous or sero-mucous, sometimes containing a few pus cells but never resulting in any serious damage to the contents of the tympanum or its walls; and, second, the suppurative cases, where the secretions are purulent in character and followed by more or less damage to the contents of the tympanic cavity and walls. Usually, the symptoms in the first cases are more mild than in the second. However, this is only a general rule, and often the reverse may be true. I have patients with a simple catarrhal inflammation of the middle ear who suffer the most excruciating pain, and purulent cases with very mild symptoms of acute ear disease. The intensity of the symptoms varies with the different characters of infection, and even with the same infection in different individuals. Suppurative inflammations are usually the result of mixed infection. The presence of hypertrophied lymphoid tissue in the pharyngeal vault greatly favors the retention and growth of infectious bacteria, which quickly involves the eustachian tube or tubes and extends upward, resulting in serious disease of the middle and internal ear. In some of the more rapidly spreading infections like measles, for instance, the ear complications are overlooked. The symptoms such as fever, restlessness, anorexia, thirst, indefinite migraine, sore throat, all being accounted for by the general systemic poisoning, and not considered as in any way local. In cases such as the one hereinafter reported, the local infection of the ear following a

marked improvement of the general condition should be easily and promptly recognized and proper treatment instituted.

In young children, unless there has been a careful record of the general symptoms, it is frequently impossible to recognize promptly the involvement of the ear in this class of cases, rupture of the drum evidenced by a discharge in the external canal being our first knowledge of the invasion. Here, too, we have the added difficulties of direct and thorough inspection of the throat and ear. Frequently the rise in temperature, intense restlessness and continued pulling at the side of the head and ear will aid us in an early diagnosis. In the more severe cases the inflammatory process extends and successively invades all of the accessory cavities, always resulting in impairment of hearing, and sometimes complete deafness.

M. J., age twenty, good family history, native of this state, farmer by occupation, previous health good, had not been ill except an occasional cold for ten years. Always considered himself healthy and normal.

On January 20, 1904, he became ill from an attack of measles. It was pronounced a mild type by his attending physician; no special treatment was given; he remained in-doors and most of the time in bed. During the succeeding ten days the following conditions were present: Slight fever, distinct rash, some cough (not severe), slight coryza, conjunctivitis, but no alarming or anxious conditions. January 30th or 31st he became worse, increase of fever, general malaise, marked soreness and achy condition of back and legs, full feeling in the ears and impairment of hearing. This last condition gradually became worse, some pain in the ear and over mastoid region. About February 2d the right ear began discharging pus. Several days later same condition was observed in the left ear. Behind both ears some redness of skin and slightly swollen condition was observed. This gradually increased on the left side. No treatment of any kind was attempted for the nose or throat; various applications were made to the external ear.

Patient was admitted to Missouri Baptist Sanitarium on February 20th, and upon examination the following record made: Temperature 103, pulse 100, large swelling over left mastoid, slight fluctuation, both ears discharging pus. Over the right mastoid slight tenderness, no special thickening of the skin, no redness, mucous membrane of nose and throat shows acute inflammatory signs and slight atrophic condition. No nasal obstruction, some adenoid growth in the pharyngeal vault. patient complains of pain and throbbing over the left mastoid region, various peculiar noises in both ears, slight vertigo on being raised to the sitting posture, pain much worse on moving the head. Total deafness; tests made with the tuning fork, watch and various noises. No special trouble of the eye or lungs noted. Head was shaved, bichloride pack applied over left mastoid, spray of Seiler's solution for nose and throat, and the usual directions given to prepare patient for operation.

February 21st a simple opening was made over the left mastoid process, finding the cells filled with a thick foul-smelling pus, I removed the entire cell structure and left a clear, smooth cavity. This I packed with iodoform gauze.

With general tonics internally and daily treatment of nose and throat and external auditory canal and dressing of open mastoid, the patient made a gradual improvement but no return of hearing.

On March 25th the patient having recovered, except the deafness, which remained total, some tinnitus in both ears and considerable vertigo, and having read of the remarkable restoration of hearing following lumbar puncture, I concluded to give this patient that chance. He readily consented on my explaining what I wished to do, and telling him it might help, though I was not specially hopeful myself.

On March 26th, with patient under chloroform anesthesia, the lumbar puncture was made, and 30 cc. of spinal fluid withdrawn. The patient remained in bed for a week following; but little reaction from the operation was observed; slight headache on the second and third days; test of hearing revealed no improvement after lumbar puncture. He seemed to feel tinnitus was less and walked decidedly better. He left the hospital on April 5th, his condition about the same.

The treatment of acute inflammations of the ear, such as I am speaking of, consists of preventive, viz., the care of nose and throat so as to reduce the dangers of further extension of the process; abortive, the management of early stages so as to limit the disease and promote recovery without perforation where possible, and lastly, surgical drainage when there is retention of fluids. Regarding the first frequent spraying of the nose and naso-pharynx with 3 per cent. of boracic acid or any mild alkaline antiseptic solution, seeing that the external auditory canal is clear. One-half per cent. sodium chloride solution I consider an excellent spray. Solutions should be used preferably lukewarm.

When there is evidence of ear involvement, no matter how mild the general condition, absolute rest in bed is important. Pain can be relieved by hot water irrigation, dry heat or partially filling the external canal with warm oil and opiates. If intense, internal remedies may be demanded, phenacetine, acetanild, aspirin, but often, in adults especially, morphine hypodermically must be used. Bowels must always be kept free and liquid diet only be given; cold or damp air is especially dangerous. Hot water irrigations administered with a fountain syringe is simple, practical and often quite effective. A teaspoonful of sodium chloride or boracic acid may be added to each pint of water which should be used at a temperature of 105° or 110° F. or even warmer. One should always be careful to have the bag just high enough to allow a gentle flow with little force,

EDITORIAL COMMENT.

THE RELATION OF B. SHIGA TO THE SUMMER DIARRHEAS OF CHILDREN.

At a meeting of the American Medical Association at Atlantic City (Section on Diseases of Children) there was an interesting discussion on the relation of B. Shiga to the summer diarrheas of children. Park, of New York, spoke of the difficulty of ascribing causal relations to specific groups of bacteria, because of the multiplicity of the varieties of intestinal bacteria, and the complexity of results necessarily ensuing from their activities. He believes that it is altogether probable that certain varieties of the colon group—always present in the normal bowel—may, under certain conditions, not always easy to define, become markedly pathogenic. It appears most probable, also, that B. Shiga is a group organism. Certain it is that the Shiga bacillus, as found in Japan, as the direct etiological factor of epidemic dysentery, is not in all respects the same as the one found in the cases of summer diarrhea in America. The fact that several varieties have already been isolated in America, whose relations to each other and to the clinical manifestations are not altogether definitely established, is certainly significant.

It is also noteworthy that no characteristic anatomical changes have been described as always resulting from infection with B. Shiga. In fact, all varieties of inflammation, from the simple catarrhal to the distinctly ulcerative lesion, have been found in undoubted Shiga cases. Indeed, Park even reported that the bacillus had been found in the stools of one normal, healthy infant.

It is thus apparent, and, indeed, the fact was emphasized in this latest discussion of the subject, that the exact relation of this group of organisms to the summer diarrheas of children cannot be considered as definitely established as yet.

Under the circumstances it is easy to understand why the serum treatment should, as yet, not be wholly satisfactory. Of eighty-three cases treated with the serum, collected by Holt, thirty-eight were fatal, and the general results were rather disappointing. There appears to be a consensus of opinion that whatever B. Shiga does, it does early. So that if results are to be obtained from the serum, it must be given early and in large doses.

Inasmuch as there is in all probability, in very many of the cases, especially in the severe forms, a mixed infection it is apparent that specific serum, antitoxic to only one group of the bacteria concerned, will not always avail.

The whole subject is one of absorbing interest. The number, and the character of the investigators now engaged in the study of the problem,

give promise of important additions to our knowledge of the ever perplexing subject of summer diarrhea of children.

MYOMA AND HEART.

A most marked change has taken place within the last few years in our views concerning the clinical aspects of myoma of the uterus. The routine examination of specimens, as now generally adopted in all modern hospitals, and carefully compiled statistics have demonstrated beyond doubt that degenerative processes of a harmful character in uterine myomas hardly can be considered rare occurrences. We owe it to the efforts of Martin, of Cullingworth and Bland Sutton, and in this country especially to the work of Ch. P. Noble, that the old ideas of the harmlessness of myomas has gradually become eradicated. To use the significant words of one of these writers, we are today forced to believe that myoma still has to be classed as a benign new growth from the standpoint of the pathologist, but that clinically it is of a decidedly malignant character. Instead of keeping up the erroneous idea that myomas disappear in the menopause, we will do better in accepting Bland Sutton's claim, that such an occurrence is just as rare as the advent of a comet. We have to admit that positive proof has been furnished by Noble, that over one-third of the women having fibroids will die unless the tumors are removed.

But there is one more complication—rather common as will be seen in the following—which gives strong support to those who plead for the early removal of the uterine fibromas.

Within the last decade several writers have called attention to the frequency with which fibromatosis of the uterus is accompanied by functional disturbances of the heart. A very valuable contribution to this question written by Dr. George Fleck, has appeared in the *Archiv. fuer Gynaecology*, volume lxxi, 1904.

It is noteworthy that just the fact that the pendulum has swung towards a more active interference, is directly responsible for the new interest of the gynecologist in the relation existing between myoma and heart failure. First, it is due to a more careful examination of the heart before operation. Secondly, to investigations into the causes of unexpected complications of the convalescence after operations for myoma. In many instances the relative insufficiency of the heart becomes only manifest if increased demands are made upon its action, if it is called upon to overcome the effects of anesthesia of a long operation, or of an acute loss of blood. It cannot be denied that in some cases the relative insufficiency existing before operation becomes an absolute one after operation, and then may be responsible for the development of extensive thrombosis, for sepsis, for embolisms, and, finally, for the death of the patient.

Fleck's investigations were directed towards the character and the causes of the impairment of the heart. The old contention that this is due to the chronic anemia, produced by frequent hemorrhages cannot be sustained any longer, because it is positively proven that the same disorder of the heart will be found in myoma patients who never bled. Another theory often quoted is that the interpolation of the tumors into the circulation increases the resistency in the circulatory system to be overcome by the action of the heart. This theory is certainly not applicable to those cases in which the size of the myoma and the intensity of the disturbance of the heart are distinctly out of proportion. It has been suggested by some writers that an abnormal condition of the circulatory system may be the primary cause for the development of myomas. Against such a contention speak the actual changes found in the myo-cardium. According to Fleck's observations on the cadaver, the morphological alterations found in the myocardium are degenerative in nature and cannot be classed, as heretofore was done, as myocarditis.

Fleck is inclined to believe that a common cause underlies both the tissue changes in the heart and the uterus, and from pathological investigations and clinical observations, he feels justified in concluding that this cause may be found in an insufficient internal secretion of the ovaries.

SIMPLE METHOD OF PHARYNGEAL IRRIGATION.

Pharyngeal irrigation by means of a syphon of seltzer water appears to be of considerable value in the early stages of almost any kind of angina. M. Gaudier (of Lille), who recommends this procedure, attaches to the mouth of the syphon a rubber tube, ending in a glass cannula. The latter is held between the patient's teeth. By pressing the lever briefly but repeatedly, jets of seltzer water are thrown with some force against the pharynx and tonsils. Between each jet the patient takes breath. The cold effervescent irrigation is usually well borne; it is very soothing, relieves the congestion of the mucous membrane, massages and cleans the tonsils, and may even bring about the evacuation of small superficial abscesses. Four or five such irrigations should be made daily.

"THE BRITISH JOURNAL OF CHILDREN'S DISEASES."

British contributions to the literature of pediatrics have been numerous and often very important, especially in the field of pathology. It is, therefore, a matter of congratulation to the profession to note the appearance of an English pediatric journal. *The British Journal of Children's Diseases* made its first appearance in January of this year.

Judging by the six numbers which have come to hand thus far, the journal will be fully up to the standard which one would expect its editor, Dr. George Carpenter, of London, to set.

The journal will doubtless reflect contemporaneous British thought in its own field and will therefore be eagerly welcomed in America.

We beg to offer Dr. Carpenter and *The British Journal of Children's Diseases* our very best wishes.

MEDICAL AND SURGICAL PROGRESS.

INTERNAL MEDICINE.

IN CHARGE OF

JESSE S. MYER, M. D.

Hemoglobin Determinations—Cases of Chronic Heart Disease.—SCHOTT (*Muenchener Medicinische Wochenschrift*, No. 19, 1904) reports the results of a series of investigations with a view to showing the effect of balneotherapy and gymnastics upon the hemaglobin in cases of heart disease, which came under their observation.

The Dore hemaglobinometer was used and found very reliable. According to the author, it has certain advantages in its simplicity, the small amount of blood required, and in the fact that undiluted blood is used for the tests.

Systematic examinations were made of the blood of one hundred and twenty patients. He finds that the balneologic-gymnastic treatment of heart diseases, whether it is weakness of the heart muscle, valvular lesions, Basedow's disease, myocarditis, with or without kidney complications, will increase the previously diminished amount of hemaglobin. In a few cases this increase was very slight. It occurs much more promptly in youthful persons and those in middle life. The aged frequently show no increase. He found some cases in which, during the treatment, the hemaglobin rapidly decreased. These, however, were found to be due to overexertion or febrile complications.

A Fatal Case of Gastric Hemorrhage Due to Miliary Aneurism of Arteries in the Mucous Membrane.—HIRSCHFELD (*Berliner Klinische Wochenschrift*, No. 22, 1904) finds but four cases of gastric hemorrhage due to miliary aneurisms reported in the literature. The case here presented is unlike any other that has as yet been reported.

The patient had in the course of seven years thirteen profuse hemorrhages. He died from the last one. The autopsy revealed a small defect in the mucous membrane, which, when sectioned and examined microscopically, proved to be a very minute aneurism. There was nowhere any evidence of an ulcer, or of a scar. There was no cirrhosis of the liver, no arterio-sclerosis, etc.; in fact no other etiological factor which could in any way explain the hemorrhages.

The patient was a haemophilic and a member of a family of bleeders. The probabilities are that the hemorrhages would not have proved fatal if the patient had not been a "bleeder." However, in the other cases reported the hemorrhages were fatal, but there was no mention of either of them being haemophilic.

The author doubts that it is possible to make a diagnosis of this condition because of the indefinite symptomatology. The physical examinations of the patient during life did not elicit pain upon pressure over the epigastric region and the patient complained of no pain whatever.

It was this point that spoke against the existence of ulcer of the stomach. The etiology of the case is entirely dark.

The author thinks it probable that some of the cases of so-called parenchymatous gastric hemorrhages are of this nature.

A Study of the Tuberculosis Question.—HELLER (*Berliner Klinische Wochenschrift*, No. 20, 1904) upholds his position with reference to tuberculosis developed through the digestive tract. He maintains that primary tuberculosis of the intestines is not infrequent. His pupils, Wagener and Hof, traced 25 per cent. of the primary tuberculosis to the digestive tract. The observations of Koch are not to be relied upon altogether.

Bovine tuberculosis is responsible for a part of human tuberculosis. The hygienic rules which have always been observed in this connection must be observed in the future in the minutest details.

The author gives an exhaustive resume of his work with reference to the ways in which infection of the lungs may take place.

The Relation of the X-Ray and Radioactive Solutions to Examination of the Stomach.—TOUSEY (*New York Medical Journal*, Vol. 79, No. 21) has made an exhaustive study of the radioactive solution in examinations of the stomach, and sums up his work in a few words as follows: Radioactive and fluorescent solution as prepared by the author are innocuous when given by the mouth or subcutaneously.

They do not produce, either singly or in combination, sufficient fluorescence to be of value in the examination of the stomach without the use of some additional light to excite their fluorescence. They will in some cases be of the greatest assistance in the x-ray diagnosis of stomach lesions, and in some cases they will be of value in the x-ray treatment of stomach lesions.

SURGERY.

IN CHARGE OF

WILLARD BARTLETT, M. D.

Chylous Cysts of the Mesentery.—TUFFIER (*Bulletins et Memoires de la Societe de Chirurgie de Paris*, Tome xxx, No. 16).—The author's first case of this kind was a man of forty-eight years, who was suddenly taken sick with terrible abdominal pain, vomiting, and there was seen on admission to the hospital a most marked distention of the abdomen in the middle line. The fact was elicited on examination that the distention was caused by a rounded tumor the size of a child's head, which was movable and fluctuated so that a probable diagnosis of hematoma was made. Upon puncture, however, there escaped 600 c.c. of a milky fluid which presented no tendency to coagulate and which was undoubtedly chyle. The result of the operation was as good as could have been de-

sired. The patient made a perfect recovery and left the hospital on the twelfth day.

It has been frequently remarked that unusual and interesting cases often appear in pairs and the experience of the author bears out this idea, for a week after the observation just mentioned another similar case presented itself. This time it was a child of twelve years with a history of constipation and periodical distention of the abdomen. This may have been said to reach the point of chronic intestinal obstruction. It was impossible to make an exact diagnosis although a tumor mass could be felt low down in the median line. A laparotomy was undertaken with the result that there was found within the mesentery a fluctuating mass which, upon puncture, revealed a chylous collection similar to the one mentioned above. In the vicinity of this first mentioned sac were two others of somewhat smaller dimensions and a large number of little ones. They all contained a similar fluid, and as they could not be safely removed their interiors were drained with gauze wicks. Nine years after the operation this last individual was examined by the author and found to be in perfect health. The rectal as well as abdominal examination revealed no trace of scar or foreign body. It may be said in general that the prognosis in this class of cases is excellent.

Experimental Studies in Enteroenterostomy and Gastroenterostomy Without Operative Opening of the Lumina of the Viscera.—SATO (*Archiv. fur Klinische Chirurgie*, Bd. 73, Hft. 1).—With characteristic Japanese energy and ingenuity this author has made a series of most interesting studies upon the lower animals, these being intended to show the resistance of the simple exposed mucosa under varying circumstances. The experiments are of more value since they were not made upon dogs alone, but part of them upon the ape, whose intestinal apparatus is well known to resemble that of man more nearly than does the gut of any other of the lower animals. The author's conclusions were as follows:

The outer surfaces of gut and stomach mucosa when approximated to one another by a suture simply grow together without an artificial opening being formed. The same may be said of the mucous membrane of either when it is exposed and then simply covered by a piece of omentum. The matter becomes quite different when the outer surface of the stomach or intestinal mucous membranes are approximated, each having been seared with the thermo-cautery. By this procedure an artificial opening results in the course of a few hours after the operation has been completed. The same may be said of these membranes when they have been united after cauterization with nitrate of silver. In these cases as well an artificial opening gradually appears. For practical purposes the author suggests that nitrate of silver should be used instead of the thermo-cautery for the purpose of making an anastomosis for the reason that it is much more easily controlled and it produces what he calls a moist necrosis while the thermo-cautery makes a dry one.

The Radical Operation of Inguinal Hernia by Peritoneal Closing.—HOFMANN (*Zentralblatt fur Chirurgie*, May 14, 1904).—The author claims that sufficient stress has not been laid in early operative methods upon the treatment of the peritoneum at the point where it goes over into the

sac. He says that true conditions can only be appreciated when one looks at the abdominal wall from the inside. In order to obliterate the funnel which is always here found, the sac must be extensively divided and a purse string suture introduced from within and tied. He goes farther and says that if the peritoneum is properly treated the edges of the wound naturally tend to come together without a suture, and that it is highly probable that if the patient were simply kept in bed long enough after this procedure, the external wound would be properly and strongly healed even though the deep layers were not sewn. Of course he does not go so far, however, as to neglect the simple procedure of wound suturing. He makes one ring suture, as he calls it, of wire, to hold the internal oblique, transversalis fascia and Poupart's ligament, thereby producing support for the sutured peritoneum. This suture is so placed that it passes through the spermatic cord and forces apart the two halves of the latter. The author tells of one hundred perfect results from this method and, what is more than remarkable for a German surgeon, there was not a single case in which the wound suppurated.

Metastatic Thyroid.—TAVEL (*Archives Provinc. de Chirurgie*, Tome xiii, No. 5).—Several interesting cases are related. The first was that of a woman of forty who had been operated upon for a pelvic tumor which recurred, and after all known treatments had been applied to the recurrence the patient died and our author was enabled to obtain an autopsy. The tumor originated in the left sacro-iliac synchondrosis, and from the fact that it had pulsed like certain goiters do, the microscopical examination was awaited with more than ordinary interest. This latter revealed within an angiosarcoma masses of thyroid tissue typical in appearance and containing colloid substances. The title of struma metastatica was then applied to the whole. Clinically the whole thing had the appearance of a rapidly growing sarcoma, though histologically there was a normal tissue structure.

The author relates another equally interesting case of similar nature, and in the theoretical discussion of the subject not only encompasses the entire literature of the subject but gives a classification of his own.

The Lymphatic Metastases in Carcinoma of the Stomach.—RENNER (*Mittheilungen aus den Grenzgebieten der Medizin und Chirurgie*, Bd. xiii, Heft 2).—This article, coming as it does, from the famous surgical clinic at Breslau, where so much pioneer stomach surgery has been done, should awaken more than ordinary interest. The observations which the author made were not only derived from surgical specimens but also from autopsy stuff, and consequently they combine features of both and are in the highest sense complete. The article is extensively illustrated, there being no less than twenty-five cuts. The author writes that it is impossible to conclude definitely that a lymph node is carcinomatous simply because it is large and hard. On the other hand, he found carcinoma masses in some of the smallest lymph nodes which he examined. One conclusion of interest at which he arrives is that many small carcinoma metastases perish in lymph nodes and are there taken care of. The most important conclusion at which he arrives is that there is some carcinoma lymph node infection in almost every case of cancer of the

stomach, consequently we must regard ourselves as forced to take away as many of these lymph nodes as possible, whether or not we are able to say beforehand that they are diseased. Growth by continuity in these cases is not the rule. It is, on the other hand, to be regarded usually as metastatic.

THERAPEUTICS.

IN CHARGE OF

ALBERT E. TAUSSIG, M. D.

The Treatment of Incarcerated Hernia by Means of Atropine Injections.—HAGEN (*Deutsches Archiv. fuer Klin. Med.*, Vol. 78, Nos. 6-7; *Therap. Monatsh.*, May, 1904).—According to the writer the rational treatment of incarcerated hernia should be as follows: After the establishment of the diagnosis an effort is made to reduce the hernia by means of mild manipulation. If this is unsuccessful, an immediate injection of atropine is given. After waiting a half hour another attempt at reduction by taxis is made, and if this again fails the same or a larger dose of atropine is injected. This may be repeated two or three times, and will often lead to a successful reduction of the hernia without operation. In the event of final failure, a herniotomy must be performed; the above treatment, even if unsuccessful, forms the best possible preparation for an operation. In the aged especially the bloodless treatment is to be preferred.

The Cause and Prevention of Iodism.—FRITZ LESSER (*Deutsche Med. Wochenschr.*, 1903, No. 46).—The writer has proven experimentally that the iodides never enter the body or circulate in it as albuminous iodine compounds, but always as an alkaline iodide. Even if the drug is given as an iodine-albuminate, it is converted into an inorganic iodide before being absorbed. Free iodine has never been found in the body. The proper term, therefore, would be, not iodism, but iodidism.

The action of iodipin (an oily iodine compound) is peculiar. While it never produces iodism when administered hypodermically, it will do so quite as readily as potassium when given by the mouth. Accordingly, it is clear that the freedom from iodism in the first case is due, not to any peculiarity of the iodipin, but to the manner of its distribution in the body. In both cases the entire dose of iodipin is converted into sodium iodide. Whereas, however, iodipin when given by the mouth is absorbed rapidly, iodine appearing in the urine a few minutes after its administration, the reverse is true when iodipin is given hypodermically. In the latter case the iodipin is deposited at the point of injection, and is absorbed very slowly and gradually. If, for instance, 20 c.c. of iodipin are injected daily for ten days sodium iodide may be demonstrated in the blood and in all the tissues for over half a year.

These considerations, as well as his extensive clinical observation, lead the writer to believe that iodism results neither directly from the total amount of iodine administered nor from the duration of the treatment,

but solely from the sudden flooding of the organism, especially the mucous membranes, with iodides rapidly absorbed. Accordingly, when giving iodides we should aim at a slow and protracted absorption of the drug. This may be effected:

1. By administering the iodide in a mucilaginous vehicle.
2. By dividing the daily quantity into a large number of small doses given at short intervals. The therapeutic effect of the drug is not at all diminished by giving it in small frequent doses, and a moderate idiosyncrasy can so be combatted.
3. By giving the drug per rectum. He likes Zeissl's formula, consisting of 2 grams sodium iodide, 30 grams water and 5 drops of tr. opii.
4. By means of hypodermic injections of iodipin. By this means we can slowly accustom an organism with an idiosyncrasy against iodides to small amounts of the drug, and can then proceed to the administration of larger doses by the mouth.

Paulsen's Syphilis Antitoxin.—APPEL and PAULSEN (*Deutsche Med. Presse*, 1904, No. 5).—The writers have used the bacteria, first grown by Paulsen and considered by him as the cause of syphilis, for the production of an antitoxin. Cultures were injected into horses and goats, at first subcutaneously, then intravenously, and with the serum so obtained fourteen syphilitics were injected. According to the writers' account, the first effect of the injections was always strikingly good. Later, however, the therapeutic activity of the serum seemed to wane, so that in most of the cases mercury had finally to be administered in the patient's interest. One case, a girl of nineteen years, seems to have been cured by the serum. In a man, infected six years ago, who is still under treatment, necrotic gummata about the neck and an anal fissure healed under the serum treatment, and a skin eruption improved distinctly. The writers request an extensive trial of the serum by other observers. Their own results are certainly not very encouraging.

Ergot in Typhoid Fever.—ALFRED T. LIVINGSTONE (*Merck's Archives*, June, 1904).—The writer is one of those who do not accept the dictum which declares that "typhoid fever is not a disease to be treated by medicines." In his view, a careful analysis of the conditions that develop in the course of typhoid fever will show that the most frequent cause of death is insufficient tone of some area or areas of the unstriped muscular fibre which comprises the muscular coat of the blood vessels, lymphatics and alimentary canal. The more thoroughly and promptly this class of tissue is placed upon the highest attainable plane of tone, and the more securely it is maintained there, the less is the likelihood of the occurrence of a fatal degree of any of those conditions. Upon this ground the writer urges the immediate and continued use of ergot, the drug whose peculiar function seems to be the stimulating, toning and strengthening of whatever unstriped muscle fibre is weak, relaxed, stretched or paralyzed. He gives the ergot hypodermically, and makes the solution as follows: One dram of solid extract of ergot is dissolved in one ounce of sterilized, distilled (cooled) water. After filtering the solution, add two minims of chloroform. The dose of this solution is

one-half to one dram, "which may be given from twice to six times a day or oftener, as indicated in the individual case."

PATHOLOGY AND BACTERIOLOGY.

IN CHARGE OF

CARL FISCH, M. D.

Upon the Production and Properties of Anticrotalus Serum.—S. FLEXNER and HIDEYO NOGUCHI (*Journal of Medical Research*, Vol. xi, No. 2).—In many directions this paper by Flexner and Noguchi is of great interest and importance. It is not only the fact that they have at last succeeded in demonstrating the possibility of obtaining an antibody for the rattle-snake venom, but above all the conclusive corroboration of their former work, that snake venoms are as specific and individualized, as are hemolysins and other specific substances. The difficulty in producing an anticrotalus serum so far was the fatal local, hemorrhagic effect of the venom upon the animals experimented upon, due to the most important constituent of this venom, the hemorrhagin. The authors have in an ingenious way transverted this toxin into a toxoid, and, a la diphtheria and tetanus, achieved their purpose, although this way of explaining the processes may antagonize those opinions promulgated lately by Wassermann, that toxoids alone will not produce immunity, but only the active stimulus of the toxin itself. The authors have also directly and conclusively shown that the action of any antivenin must be always specific and limited to that species of venom by which it was produced. Crotalus antivenin has absolutely no effect upon cobra venom, and vice versa. These results are not only theoretically of the greatest importance, but will have great weight in the effort to prepare these antivenins for practical use. In addition it may be mentioned that the immunization with venom leads not only to the formation of the antivenin-ambceptor, but also to that of specific precipitins.

The Vascular Supply and the Curability of Tumors.—H. RIBBERT (*Deutsche Medic. Woch.*, 1904, No. 22).—The impossibility to arrive at a satisfactory solution of the tumor problem stimulates the zeal of all observers to find out new characters and peculiarities in all directions. Ribbert in this paper deals with a peculiarity to which, therefore, little attention has been paid, but which, nevertheless, to a degree may have a bearing on the relation of tumors to the organism. He shows that the cells of tumors receive a blood supply inferior to that furnished to the cells of the organs. The afferent vessels are not only arranged irregularly, but branch atypically. The total cross-section of these vessels is too small for the area to be provided for by them. Histologically the vessels are imperfect. There is no differentiation between arterial and venous channels, and gross changes are frequently seen leading to dilatation, etc., and thereby to insufficient nutrition of the tissue. Consequently there are retrogressive changes and finally necrosis. The func-

tional relation between the tumor cells and the vessels is not normal: the former, therefore, cannot utilize the material carried to them by the blood in a way which normal relations make possible. The so-called increased vital energy of tumor cells is only apparent; it is increased only one-sidedly in the direction of multiplication, but not of functional perfectness. For the latter the amount of material supplied to them would not be sufficient. Since thus new formations are less well nourished and have less resistance than the cells of normal tissues, the practical application of reactions either by way of the blood or by local impressions (x-rays), is justifiable. The x-rays, for instance, will not act deleteriously on the less resistant carcinoma cells, nor on the normal elements that are less easily influenced.

About the Action of Antitoxins in the Living Organism.—A. WASSERMANN and C. BRUCK (*Deutsche Medicin. Woch.*, 1904, No. 21).—The experiments reported by Wassermann and Bruck were instigated by the introduction by Behring of a mystical, vital third factor into the interaction of toxin and antitoxin. The authors injected into guinea pigs a mixture of tetanus toxin and antitoxin just neutral to these animals. If they preceded this injection by an adrenalin injection at the same site and thus produced a local capillary contraction, the animals died of typical tetanus. Under these conditions the toxin was taken up by the peripheral nerve endings and traveled along the axis cylinders to the centers, while the antitoxin did not find its way into the circulation. In the organism, therefore, a separation of the toxin and antitoxin had occurred. If, however, the antitoxin, previous to the injection, had been in contact with the toxin for two hours, the binding of one to the other was so strong that in spite of the barring of the road of the blood circulation no separation was noticed. Here, also, when the solutions were concentrated, the binding occurred in a shorter time. These experiments strongly point to the correctness of Ehrlich's position, viz., the antitoxin by chemical combination keeps away the toxin from the living and susceptible cells. There is no unknown or third factor taking part in this process.

The Antilytic Action of Salt Solutions and other Substances.—L. HECTOEN and G. F. RUEDIGER (*Journal of Infectious Diseases*, 1904, No. 3).—This paper extends the previous investigations of Hectoén on hemolysins to the bacteriolysins. Here as there certain salts act antilytic. The subject is practically and theoretically of the greatest interest and will become of the highest importance, if in the future it will be considered in the light of the latest investigations of Matthews on the solution-tension of ions (*Journal of Physiology*, 1904, p. 290). Here it must be sufficient to indicate the results obtained by the conclusions arrived at by Hectoén and Ruediger.

In small doses of one-eighth molecular solutions many salts prevent hemolysis and bacteriolysis by immune-sera. In the same way the action of cobra venom by serum is inhibited. Soluble substances extracted from disintegrated typhoid bacilli have also this effect. The action of these salts is directed on the complements, a conclusion which is made on the basis of very extensive experiments covering all possibilities. The in-

vestigations make it at least probable that the complements as well as antilytic salt solutions follow simple physico-chemical laws.

That the same salts, as a rule neutralize all complements suggests that the physico-chemical properties of the latter are very similar in all of them. The function of the amboceptors remains unaffected by antilytic salts in a concentration that neutralizes the complements. The susceptibility of complements to the influences of various non-specific anticomplements (salts, glycogen, soluble products of typhoid bacilli, etc.), makes it appear likely that neutralization of complements may play an important role in certain infections.

GYNECOLOGY AND OBSTETRICS.

IN CHARGE OF

HUGO EHRENFEST, M. D.

On Painful and Tender Incipient Ovarian Tumors.—ALBAN DORAN (*Jour. of Obstetr. of Brit. Empire*, May, 1904).—On the basis of a number of cases the writer discusses the importance of pain and tenderness for the diagnosis of incipient ovarian tumors. Credit is given to Dr. Davenport, of Boston, for having called attention to this point. In Doran's opinion there is no special symptom nor group of symptoms known by which a small painful ovarian tumor in the pelvis can be distinguished from an inflamed ovary. If rest causes the pain to diminish, whilst the pelvic swelling increases, the evidence that the ovary is cystic and not inflamed will be strong, but not conclusive. Painfulness of a small ovarian tumor is of direct advantage to the patient, for it betrays the presence of the new growth at an early stage. In none of the nine cases of this series, in which the tumors were painful, was there any complication of the slightest gravity found.

On the Prevention of Puerperal Fever.—P. ZWEIFEL (*Zentralbl.fuer Gyn*, May 28, 1904).—After giving an historical sketch of the introduction of antiseptics and asepsis into obstetrical work, Zweifel pleads for the adoption by the obstetrician of a principle, the importance of which is generally accepted by the surgeon, namely: the exact control of all hemorrhage. No other fact is indirectly of greater importance in the effective avoidance of infection.

Following this idea, in Zweifel's clinic, in every case a half to one hour after the expulsion of the placenta, small specula are introduced in the vagina, and all coagula carefully removed. For obvious reasons an exact stopping of hemorrhage is impossible. This practice led to a distinct reduction of the fever cases in the clinic. Striking [and conclusive for the contention that not too much weight should be laid upon statistics based upon a small number of cases (Edit.)] is the fact that decidedly less favorable results were obtained when rubber gloves were used in carrying out this procedure. It is needless to say that the introduction of the specula is preceded by a careful disinfection of the vulva.

Zweifel contemplates an investigation as to whether these dangerous coagula could not be removed with less trouble to the patient by means of a warm saline solution. Having always been a strong opponent of the use of douches in obstetrical practice, he does not fail to emphasize that these douches would be essentially different from those administered with the idea of disinfecting the genital tract.

Amenorrhea Associated with Serious Eye Symptoms in a Young Girl.—J. E. GEMELL (*Jour. of Obstetr. of Brit. Emp.*, May, 1904).—The author records the history of a girl, sixteen years of age, whose last menstruation appeared September 19th at the expected time. About six weeks later the patient suddenly found that she was blind in her right eye, but could see quite well with her left eye. At Christmas an oculist was consulted, who gave the following report: Right vision nil; doubtful whether she can even detect light. Right fundal reflex nil, except a small triangular space at the upper and inner quadrant. Left vision about normal. In the left eye is seen a faint floating vitreous cloud.

Considering the fact that the general health of the girl is good, and that her menstruation since her thirteenth year occurred regularly every twenty-eight days, the writer feels justified in concluding that a vicarious hemorrhage had taken place in the right eye. With the idea of re-establishing the menstrual flow a mixture of iron and aloes was prescribed, and thyroid tablets given at bedtime. The patient was kept in bed, and occasionally leeches were applied to the temples. January 18th the oculist's report was: Left eye perfect; right eye very little improved.

The author thinks that the prognosis of vicarious hemorrhages into the eye is unfavorable and that the danger of repeated hemorrhage is imminent, if the menstrual period does not become re-established.

Delivery of Twins with an Interval of Seventeen Days.—J. PAULIN (*Hospitalstidende*, No. 6, 1904; rev. *Muenchn. Med. Wochenschr.*, No. 16, 1904).—The writer reports the details of the following very unusual case: A married woman of twenty-five was in about the eighth month of her second pregnancy, when she was surprised by the sudden escape of amniotic fluid. Labor pains began the same evening. Shortly afterwards a living child was delivered, soon followed by a normal placenta. The attending midwife recognized the presence of another fetus in the uterus and called the writer in consultation. The second fetus was distinctly palpable, its heart sounds clear and loud. Some soft tissue could be felt in the vagina, and adjoining it on the left a cervix was found, comparatively hard and firm, its external orifice being partially closed. The examining finger could not pass through the cervical canal. Labor pains had completely stopped and the woman was soon asleep. The next day no uterine contractions could be observed. There were no lochia, nor any signs of secretion of milk. Nine days later patient left the bed.

Sixteen days after the delivery of the first child the membranes of the other fetus ruptured suddenly, and the next morning another living child was born. The placenta was shortly afterwards expelled. Like the first, the second puerperium took an absolutely normal course. But this time the breasts soon became engorged and milk was secreted in

such quantity that the mother was enabled to nurse both children. An examination, made a few weeks later, revealed the interesting fact that the uterine cavity was divided into two sections by a broad septum, the presence of which was ascertained with the uterine sound. On palpation the uterus did not show any anomalies.

Bladder Irritation in Girls.—W. D. SPANTON (*Medic. Press and Circular*; rev. *Amer. Medicine*, June 4, 1904).—In examining under the microscope a fluffy mass passed by a child of three years, in whom micturition was painful, the author found it to contain woolen fibers entangled in mucus. Several similar cases presented themselves later. In all of these the trouble originated in the woolen combination suits, rather rough at the edges, which the little girls wore, some of the fibers from which had wormed their way along the urethra into the bladder. Linen fibers being smooth, this accident does not occur. With a change in garments and the use of a diuretic for a few days all trouble disappeared.

PEDIATRICS.

IN CHARGE OF

ALFRED FRIEDLANDER, M. D.

A German View of Laboratory Feeding.—In a review of an article of Rotch's on laboratory milk modification, a well-known German pediatricist, Stoeltzner, of Berlin, has this to say (*Jahrb. f. Kinderheilk*, May, 1904): "Rotch repeats the well-known descriptions of the milk laboratories. It appears very questionable to the reviewer whether the good results obtained are due essentially, as the American authors would have us believe, to the laboratory modification *per se*. The dairies in connection with the laboratories furnish an extraordinarily clean milk, which can be shipped for great distances without previous sterilization—without any deterioration. The use of such milk, without any modification, would probably give excellent results."

Enuresis in Children.—LEWIS (*British Jour. of Children's Dis.*, No. 2, 1904) says that the diversity of assigned causes, and the varieties of treatment employed for this condition, would suggest that the pathology had not been studied very carefully.

He believes that these children are usually either anemic, bilious-looking or lymphatic. They are generally not fond of meat, and live mostly on farinaceous and saccharine foods. They are disinclined for exertion or study. They pass enormous quantities of urine at night, of low specific gravity, neutral or alkaline in reaction, and containing deposits of triple phosphates or oxalates. The bladder is probably not emptied until it is full, as the unirritating urine does not give a sufficient call to the central nervous system to waken the patient, but enough to start the necessary reflex for emptying the bladder only.

The author, therefore, treats these cases by putting them on a rigid anti-diabetic diet, from which all starchy foods are excluded. General tonic treatment is given at the same time. After the symptom disappears, starchy food is allowed for breakfast, but at no other time.

In three to four weeks ordinary diet can usually be resumed.

The author does not insist that enuresis is a condition of late rickets, but he does believe that it is a weak bodily condition, caused by excessive starchy diet, and associated with inability to properly digest that excess.

Cytoprognosis of Lactation.—LEVY (*These de Paris*, 1903, *Arch. de Med. des Enf.*) has confirmed the following observations, previously made by Weill:

(1) All corpuscles of the colostrum are leucocytes.

(2) In centrifugalized colostrum or milk a high percentage of polymorpho-nuclears is a good sign, as signifying either (in colostrum) that there will be an abundant secretion of milk, or (in milk) that a good secretion is being maintained.

(3) A high percentage of lymphocytes is a sign of bad prognostic import, so far as lactation is concerned. It would indicate the transudation of simple serum is beginning to surpass the actual secretion of milk itself. The author has studied twenty cases very thoroughly, and is able to confirm these observations by another method of investigation.

Just before the milk secretion is established, or on the day itself, the breast fluid should be carefully examined. The centrifuge should be used. A thick sediment, with a large number of leucocytes, the greater proportion being polymorphonuclears, may be taken as a sign of positive prognostic value.

A small thin sediment with predominance of mononuclear forms denotes the secretion is not apt to be promptly established, or that when established it is apt to be insufficient. It is, however, to be noted that a secretion at first poor, may improve after a longer or shorter period.

An Epidemic of Whooping Cough in the Very Young.—PORAK and DURANTE (*Arch. de Med. des Enf.*, June, 1904) report an epidemic of whooping cough occurring in the Pavilion of the Premature of the Paris Maternity.

In this pavilion the premature infants are all wet-nursed, the mothers partially nursing their own children at the same time. Each woman nurses three premature infants, in addition to her own child.

It is ordinarily stated that pertussis is rather rare under two years, and that when it does occur in very early life the mortality is very high. Commenting on this fact, the authors call attention to the peculiarities of the epidemic observed by them.

There were forty-four premature infants in the pavilion during the time of the epidemic. Among these, there occurred only *one* distinct case of pertussis. This case was fatal, however.

There were fourteen nurslings in the pavilion on mixed diet, as before explained. Of these, ten were attacked, the four who escaped being among the youngest infants of this class. The ages of the children

varied from one to ten months, only one infant being over six months of age.

Seven of the ten cases showed pulmonary complications. In two of these cases there was merely a congestion of the lungs; in the other five there was a distinct bronchopneumonia.

In view of the prevailing opinion as to the mortality of pertussis in early life, it is important to note that *not one* of these ten cases proved fatal, despite the complications in seven of the cases.

The treatment employed consisted essentially in the use of belladonna and grindelia robusta for the pertussis proper, and in the use of cool baths, benzoate of soda and acetate of ammonia for the pulmonary complications.

ORTHOPEDICS.

IN CHARGE OF

NATHANIEL ALLISON, M. D.

Two Cases of Suture of the Olecranon; Indications and Technique of Operation.—JULES ABADIE and JACQUES DELAGE (*Revue D'Orthopedie*, May, 1904).—The question of operative treatment as against non-operative treatment is taken up and the paper points strongly to the operative method. This applies to all forms of fracture of the olecranon, old or new, simple or compound. An operative technique is fully described and illustrated which shows how to place the wires. The cases both resulted excellently. The authors' *en resume* runs thus: By the old method of treatment of fractures of the olecranon we had often to be satisfied with a mediocre functional result. We now have two methods—bone suture and immediate massage. The suture of the bone fragments is the ideal method, as it gives perfect apposition of the fragments, and it is not dangerous provided the operator, the operation and the patient are surgically clean.

For a recent simple fracture the immediate massage method of Tripier often gives good results, but it is possible that bone suture would also make these cases more sure of good result. Bone suture is necessary in open fracture or old fracture with bad union, causing ankylosis.

Silver wire should be used and movement and massage should commence eight to ten days after the operation.

The Early Operative Treatment of Tuberculous Osteitis of the Knee.—BERNARD BARTOW, M. D., Buffalo, N. Y. (*The American Journal of Orthopedic Surgery*, May, 1904).—Drawing conclusions from a series of eight very successful cases, a sufficient period of time having elapsed to make the conclusions entirely trustworthy, Dr. Bartow recommends the removal of the tuberculous focus by thorough curettage, swabbing the cavity with zinc chloride and carbolic acid, and sewing up the wound. The cases where this radical procedure is to be employed must be selected with great care; it should never be attempted where the joint is involved. The fact that tuberculous knee disease starts in the great ma-

jority of cases in the femoral epiphysis, and that its presence there can be made out by physical signs before the joint surfaces are involved, is well demonstrated in the cases presented. Dr. Bartow does not believe in placing absolute reliance in the interpretation of skiagrams, especially where this interpretation would nullify evidence derived from other trustworthy sources; unless the pictures are most skillfully taken they are of little value as operative guides.

As to the correction of malposture of the knee, he advises the division of the hamstring tendons within their sheaths in all instances where the flexor contraction does not disappear under the anæsthetic, rather than the employment of force to overcome these muscles.

In summarizing the important results of this treatment, he states that the range of preserved motion in the knee varied from complete functional restoration in one case to a limitation at 15 degrees in another; intermediate to these there was motion of from 60 to 90 degrees. Patients are reported well after a lapse of from one to three years after operation.

Fractures of the Lower End of the Radius.—VERTNER KERNERSON, A. M., M. D., Buffalo, N. Y. (*N. Y. and Phila. Medical Journal*, June 11, 1904).—This paper presents a solution of the all too frequent bad results which follow Colles' fracture. The "silver fork" deformity is not infrequently seen and a simple and sure method of reducing this deformity which a practitioner of ordinary strength can use and use alone; this, too, in spite of the patient, if he be intractable, is surely a thing of great value. The method: a skein of "Germantown Zephyr" yarn is made into a running noose; this noose is looped about the affected wrist so that the knot comes over the radial side; the other end is then made secure to a door-jam or staple on the wall. The operator then makes gentle counter traction on the forearm until the wrist is tired out, as it were; he will then find that the fracture is reduced. This method of reduction will be found to be very practical and will insure, even in the hands of those who see a limited number of cases, a perfect reduction without unnecessary force or the use of an anæsthetic. The reduction will be of such a character also that it will "stay" while a splint is leisurely applied, and will insure the patient a straight wrist without the "silver fork" deformity.

Dr. Kernerson reports several cases and illustrates his article with radiographs that bear out his claims.

Some Remarks on the Treatment and Aftertreatment of Congenital Dislocations of the Hip.—ADOLPH LORENZ, M. D., Vienna (*American Medicine*, June 18, 1904).—Dr. Lorenz says that ever since he published in his book on congenital hip dislocation his method for its reduction he has watched the ideas and criticisms of others very carefully, hoping that he might see some possible improvement in the method; the method after ten years of trial stands exactly as it did in the beginning. He can add nothing to the technic. He places himself strongly against machines to aid in reduction, especially the "Boston machine," because the operator cannot tell, as in the manual method, just how much force he is using; nor can he use the head of the femur as a probe to palpate

the fundus of the acetabulum. Cases under the age limit are "playfully easy" to reduce manually.

The position of right angle abduction, or the "primarstellung," is the one thing to be obtained, held and retained in order to be successful; he does not advocate hyperabduction, but claims that this position is the cause of the anterior displacements. Therefore, put the limb into right angle abduction, keep the limb there for six or seven months, then when exercises are started and massage of the limb begun, see that the ability to actively return the limb to this primarstellung is not lost.

In a series of six hundred and eighty hips operated upon by this so-called bloodless method, he states that three hundred and fifty-eight show good anatomic results (*i. e.*, 52.6 per cent., or a good half of the cases). He objects to increasing the upper age limit, placing it at nine to ten in single and seven to eight in double cases.

The Roentgen picture is liable to mislead in judging the results. If the functional, that is the practical, results are satisfactory he does not believe that too much stress should be laid on an x-ray photo. *Nil perfectum sub sole.*

The Silver Bolt as a Means of Fixing Ununited Fractures of Certain Long Bones.—STEPHEN H. WATTS, M. D. (*Johns Hopkins Hospital Bulletin*, April, 1904).—The case upon which this method was tried was that of a young man who was so severely injured that it was necessary to amputate one of his legs; the other presented a compound fracture of the femur at about the middle of the shaft. Here a right angle mortise was made and a silver bolt $1\frac{1}{2}$ inches long, 3-32 inches in diameter, run through and the nut screwed tightly down. Union took place and after several months the patient was able to use the leg perfectly; an x-ray photo shows the perfect apposition of fragments obtained and held.

NEUROLOGY.

IN CHARGE OF

SIDNEY I. SCHWAB, M. D.

Hereditary Syphilitic Tabes (Juvenile Tabes).—WILLIAMSON (*Review of Psychiatry and Neurology*).—Three cases are here reported, girl aged eight, boy aged thirteen, and a girl aged seventeen. All three patients were blind owing to primary optic atrophy. In two cases there was evidence of congenital syphilis; in the third case congenital syphilis was probable, the father having suffered from the disease.

The Treatment of Epilepsy Without Bromide.—HALMI (*Psychiatrische-Neurologische Wochenschrift*, May 21, 1904).—In treating epileptics by means of the so-called salt starvation method, the author observed that the bromides used produced very marked results even when the dosage was considerably reduced. This was interpreted as the result of a bromide intoxication and as a necessary result of the bromide treatment

when the Na Cl was taken out of the daily food. In order to test the accuracy of this observation a certain number of patients who had been under this treatment for a period of time were gradually deprived of their daily amount of bromide while they were still under the salt starvation diet. As the bromide was reduced the salt was increased so that the patients were unaware of the substitution. The results of this experiment were very encouraging. The number of attacks and the physical condition showed marked improvement. The author concludes that it is possible to treat epileptics without bromide if the interest of the patient is kept up by well adapted suggestion and employment. (The results here recorded were obtained in a psychiatric clinic.)

Tabes and Tabo—Paralysis in Childhood and at the Age of Puberty.—HAGELSTAM (*Deut. Zeit. für Nervenheilkunde*, Vol. 26, No. 3).—The author has collected forty-five cases in the literature, and in this number he adds three of his own. From a study of these cases and the three here reported, he concludes that tabes and tabo-paralysis develops in the child as a consequence of an heredity or of an early acquired syphilis. An hereditary history is much more frequently found in these cases than in the adult cases. In the great majority of the cases tabes, tabo-paralysis or cerebral syphilis is found in the antecedents. It also appears that in this age the female sex is more frequently attacked with the diseases than in the adult.

Points of Resemblance Between Paralysis Agitans and Arthritis Deformans.—W. G. SPILLER (*University of Pennsylvania Medical Bulletin*, May, 1904).—Attention is called in this interesting paper to the occurrence of arthritic symptoms in the way of arthritis deformans in a case of paralysis agitans in which the tremor was limited to the right side. In this case the spinal cord was rigid and there was a marked kyphosis of the cervico-thoracic region. The autopsy showed no lesions of the nervous system sufficiently pronounced to explain the symptoms of paralysis agitans, but marked changes were demonstrated in the spinal vertebrae. This paper is important because it suggests a relation more or less intimate between the degenerative changes in the osseous system and the resulting symptoms on the part of the nervous system, which at first appear to have nothing in common.

GENITO-URINARY SURGERY.

IN CHARGE OF

H. MCC. JOHNSON, M. D.

The Operative Treatment of the Hypertrophied Prostate.—WATSON (*Ann. Surg.*, June, 1904).—In this excellent article Watson gives a very complete historical review and summary of operative methods and modifications in prostatic hypertrophy. Gouley was the first to deliberately and clearly formulate a plan for the removal of the entire gland

from the perineum. Albarran appears to have been the first to introduce the prostatic tractor, rapidly followed by Syms, Delbet, De Pezzer, Lydston and Young.

Watson regards the choice of operations to be limited to these four.

1. The palliative operations of perineal and suprapubic drainage.
2. The Bottini.
3. The total removal of the hypertrophied lobes by perineal operations.
4. The same by the suprapubic and the combined operation.

It is interesting to note that the author believes that no harm accrues from injury or removal of the prostatic urethra, and while the whole gland cannot be removed leaving the urethra behind intact, yet the greater part of it may be removed without injuring the urethra. The most important factor for or against radical operation is the renal function. The operation should be performed much earlier than we are accustomed to apply it. Under conditions in which there is nothing to prevent a free choice of methods the total removal of the gland by the best of the perineal technique is that of choice. If the perineal route is not applicable, the suprapubic is the operation of choice, and when contra-indications are present which make this operation undesirable, the Bottini becomes the operation by choice, and when the patient's condition is such as to make any of the above three methods inappropriate, and we are obliged to do something, we will do a palliative operation for drainage.

The Problems of the Technic of Ureteral Catheterization.—HOLISCHER and SCHMIDT (*Jour. A. M. A.*, June 4, 1904).—In this very replete consideration of the subject the technic of ureteral catheterization is considered. The various kinds of instruments devised, their advantages and disadvantages are described and illustrated; and the authors present for consideration, and prefer for use, their modification of Brenner's ureteral cystoscope, which is one of direct view, is a convenient size, allows of catheterizing both ureters at the same sitting, and of leaving both catheters in place after the cystoscope is removed. It, furthermore, permits the use of catheters with injection attachment at the distal end.

Renal Redecapsulation.—EDEBOHLS (*Med. Rec.*, May 21, 1904).—This case was one of right and left, chronic interstitial nephritis, with infection. While the patient made an uninterrupted recovery from double renal decapsulation, the infected nature of the condition did not improve but rather, after awhile, became enhanced. Not quite two years later, the patient developed anuria with convulsions. When he had but a few hours to live, the new capsule which had formed about the kidneys after decapsulation was removed through operation on both kidneys. This started the urine to flow, but was done too late to counteract the uremia, the patient dying five hours later in uremic coma.

Surgery of Nephritis.—EDEBOHLS (*N. Y. and Phila. Med. Jour.*, May 21 and 28, 1904).—Edebohls here presents renal decapsulation in all its principal phases and endeavors to meet the criticisms that have been

made upon it since its promulgation. In the experience of the author a new capsule is formed after renal decapsulation, but it is vascular and non-contractile. He advises the operation for anyone who has the reasonable expectation of life of not less than a month without operation, provided: there is a clear and unequivocal establishment of the diagnosis of chronic Bright's disease; that there is an absence of absolute contraindication to any operation; and that the surgeon is reasonably familiar with surgery of the kidney. The operation is indicated in all varieties of chronic nephritis, even marked changes in the heart and blood vessels disappearing after it. Those cases with albumenuric retinitis have been very discouraging to the author. He still finds cases of unilateral nephritis. While the future may find some medical means of curing these diseases which may make renal decapsulation a memory, yet, for the present, applied early in the course of a chronic nephritis and in the absence of complications, it is almost free from danger in expert hands, and is almost a certain cure.

A Consideration of the Surgical Treatment of Chronic Bright's Disease from the Ophthalmic Standpoint.—SUKER (*N. Y. and Phila. Med. Jour.*, June 4, 1904).—Decapsulation of the kidney for chronic Bright's disease, the writer regards as absolutely contraindicated in such cases as present a retinitis or a neuroretinitis, with or without hemorrhages. The death rate of this class of cases under the best medical treatment is about 75 per cent. for the first year and 85 per cent. for the second, scarcely any subjects surviving three or four years; while in cases operated upon it is 100 per cent. for the first year (from reported cases.)

The Medical Aspect of Decapsulation of the Kidneys for the Cure of Chronic Bright's Disease.—ELLIOTT (*N. Y. and Phila. Med. Jour.*, June 4, 1904).—The following conclusion is offered:

1. Chronic Bright's disease in its development constitutes a diseased condition of the entire system.

2. It is a disease of very gradual development, and in the great majority of cases, has existed for months and years before the patient comes under observation.

3. It is produced by a chronic toxemia, either systemic or infective in origin, which produces coincidently as a result, widespread arterial and cardiac degenerative changes, which, being once established, are permanent, and in their development eventually constitute the most threatening element of the disease.

4. General edema or anasarca in chronic renal disease is in many instances in great measure a cardiac dropsy, brought about by advancing myocardial degeneration. It is occasionally so in chronic parenchymatous nephritis, and almost invariably so in chronic interstitial nephritis,

5. It may be stated that, in like manner, developing anuria and uremia in chronic nephritis may be largely cardiac in production, the functional inadequacy of the kidneys having its inception in the fall of blood pressure incident to circulatory failure.

6. In the latter stages of chronic nephritis, of whatever character, the

case is apt to take on these cardiac aspects, which virtually convert the therapeutic problem into a question of sustaining a failing heart.

7. Albuminuric retinitis must be looked upon as one of the terminal symptoms of chronic nephritis. The concurrence of opinion places a limit of two years upon the prognosis after development of this complication. The statistics gathered by Suker of cases operated on, show that, in place of prolonging this limit of expectancy, operation has a decidedly contrary effect.

8. It is to be borne in mind that chronic nephritis is a disease of slow and spasmodic development. It is well to realize its exacerbations and remissions, so as to avoid the error of mistaking remissions for cures.

9. The mere fact that the general condition of the patient improves somewhat after decapsulation does not establish the validity of the operation, for hygiene and rest will do the same for the patient to a remarkable degree in many cases. As the factors of hygiene and rest are invariably associated with the surgical procedure, it is possible that the resulting benefit may, to some extent, accrue from those sources.

10. The results of experimentation demonstrate that, within a period of three months and a half after decapsulation, a new, and in most cases a tougher, fibrous envelope has taken the place of the original capsule. This fact may account for the many relapses and deaths after that period in cases operated on, and in chronic cases, at least, it narrows the prospect of improvement to a period of months.

DERMATOLOGY AND SYPHILIS.

IN CHARGE OF

MARTIN F. ENGMAN, M. D.

The Internal Administration of Ichthyol in Three Cases of Mycosis Fungoides.—MENAHEM HODARA (*Monatsch. fuer Prakt. Derm.*, Band 38, No. 10).—The first case of mycosis fungoides was in a woman sixty years old who had had the disease for seven years. The case presented all the typical appearances of mycosis fungoides, large tumors, thickened patches of skin, etc. The patient has taken the drug intermittently in one-half to one gramme doses, in capsules, three years, with improvement.

The second case, a man of forty, was a lighter form of the disease, with thickened plaques and papules and marked pruritis. The patient was given one-half to one gramme daily of ichthyol three to four months. The plaques were painted with ichthyol collodion. There was some improvement, but he was lost sight of.

The third case was in a man sixty-five years old. He was given the same doses of ichthyol as above, with great improvement.

Some New Therapeutic Results in the Treatment with Radium and Radio-Active Bodies.—DR. FOVEAU DE COURMELLES (*Le Progress Medicale*, May 28, 1904).—The writer reported four cases treated with radium, namely, one case of epithelioma of the tongue, two cases of epithelioma

of the skin and one case of epithelioma of the vagino-uterine junction. In epithelioma he obtained supple and smooth cicatrices. The other two cases were greatly improved. The author remarks that for cancers in certain positions, as in the mouth and esophagus, radium in tubes is particularly applicable.

Cornu Cutaneum of the Trunk.—DR. ROCHARD (*Gazette des Hopiteaux*, May 26, 1904).—This was an unusually large horn, which occurred upon a sebaceous cyst measuring 8 cm. in height and fixed upon a base of 67 cm. Its period of evolution was uniquely long, occurring in a woman of sixty-two, having existed since she was of the age of fifteen.

Developmental Defects of the Skin and Their Malignant Growth.—HENRY G. ANTHONY, M. D. (*Journal of the American Medical Association*, June 18, 1904).—This is Dr. Anthony's (chairman) address for the section of cutaneous medicine at the fifty-fifth annual session of the American Medical Association, and it is a very excellent dissertation upon this important subject, and is well worth a careful perusal. In speaking of the mooted subject the definition of nevus, Dr. Anthony remarks: "In my opinion the word nevus should be used simply as a term of clinical convenience to designate any mark on the skin present at birth or developing shortly after birth, regardless of its histologic structure and without any attempt at scientific accuracy. This is still the accepted use of the word in other branches of medicine, and it should continue to be employed in this sense in dermatology. Any expansion in the meaning of the word in dermatology will cause as much confusion as does the double meaning of the word tubercle. As a term to designate deep-seated deposits the word nodule should be employed, and we should use the expressions nodular syphilide and nodular leprosy rather than call these lesions tubercular syphilide and tubercular leprosy. To avoid all confusion of the nomenclature and misuse of the word nevus it would be advantageous to employ the expressions developmental defects of the skin to designate all abnormal conditions of intrauterine origin which are not due to disease of the fetus. There are two classes of cases, misplacements and anomalies of development. Under the latter class we would recognize anomalies of hair and nails, of keratinization, of pigmentation, of blood vessels, of fibrous tissue and some other forms."

On the Surgical Importance of the Visceral Crises in the Erythema Group of Skin Diseases.—DR. WILLIAM OSLER (*Medical Record*, May 14, 1904).—Dr. Osler, before the Association of American Physicians at the nineteenth annual meeting, held in Washington, May, 1904, called attention to a subject which is of the greatest importance in tracing the relationship between the erythema group and certain obscure affections of the viscera, probably of similar origin. He states that the possibility of mistaking these visceral crises for appendicitis, intussusception or obstruction of the bowel, and handing the patient over to the surgeon for operation, is by no means remote. He gives a history of three cases in which laparotomy was performed, and draws from them the following practical lessons: First, in children with colic the greatest care should

be taken to get a full history, which may bring out the fact of previous attacks either of skin lesions, arthritis or intestinal crises. Secondly, there should be made the most careful inspection of the skin for angio-neurotic edema, purpura and erythema. It should also be remembered that recurring colic may be for many years the sole feature of this remarkable disease, and the obscurity of the attacks of colic may not be cleared up until the appearance of the skin lesions. In one of the cases here reported the intestinal crises in combination with arthritis and the renal features left no doubt as to the diagnosis. Dr. Osler says that in the next attack there may be purpura or angio-neurotic edema, or an acute nephritis may occur alone. The colic is the most constant of the visceral manifestations, occurring in twenty-five of the author's twenty-nine cases. It seems never to be dangerous. In no case recorded has death resulted from intestinal causes.

Vaccine and Vaccination.—DR. GEORGE DOCK (*Bulletin of the Johns Hopkins Hospital*, April, 1904).—Under the sub-heading of "Some Aspects of American Vaccine Virus," the author remarks that it might be supposed that the makers of vaccine virus would not sell inferior preparations, but experience shows that this is not so. Dr. Rosneau, of the United States and Marine Hospital Service, has demonstrated that practically all the vaccine virus sold in this country has an unnecessarily large bacterial contamination, and although his observations show that improvements have taken place since he began his work, results are still far from satisfactory. Weak specific action has an important bearing on the practical use of vaccination. With the best vaccine we expect to produce immunity lasting for several years, if not, as was once hoped, for a lifetime. With the less effective virus the immunity is shortened from a few weeks to a few months, and, on the whole, is very imperfect. The writer remarks, that if the general government can furnish pure seed to farmers and the separate states can regulate the sale of oleomargarine and other commercial products, vaccine should easily be put under public control provided, of course, that the wishes of the people were not thwarted by the unseen but powerful influence of lobbies, supported by those who preferred to keep the industry in their own hands. This point, to the abstractor, seems to be of great importance on account of the various contributing factors which go to make up a good virus and a good protective vaccination.

A Case of Recurring Membranous Stomatitis, Associated with Erythema Exudativum Multiforme (Hebra).—LOUIS B. BLAIR (*Medical Record*, May 7, 1904).—This occurred in a boy of twelve. It began as numerous sores in the mouth, resembling the mucous patches of syphilis, upon the gums, hard palate, tongue and buccal surfaces. There was extensive salivation, bad odor and the lymphatic nodes and glands were enlarged. The sores were covered with a well-marked, thick membrane. The tongue was swollen and swallowing was difficult. Six days after the beginning of the stomatitis an erythematous rash appeared on the surface of the body, on the extensor surfaces. The conjunctiva assumed a diphtheria-like invasion and the eyes were closed. Upon the face the eruption was confluent, like variola. There were also blebs scattered

over the body, becoming hemorrhagic and pustular. The patient had several recurrent attacks similar to this one. Bacteriologically, only cocci were found, probably staphylococcus pyogenes aureus. The case is unique on account of its mucous membrane lesions and of the eyes.

LARYNGOLOGY AND OTOTOLOGY.

IN CHARGE OF

WILLIAM E. SAUER, M. D.

Ozaena Cured by Behring's Anti-Diphtheritic Serum.—TARNOWSKI (*Deutsche Medicinische Wochenschrift*, June 2, 1904) reports two cases of ozaena cured, or practically cured, by subcutaneous injections of diphtheria antitoxin. In the first case only one injection of 1,500 units was required. In a second case two injections were given within a period of eight days. In both these cases the sense of smell returned and all crusting ceased. In a third case, one of forty years' standing, several injections were made with the result that there was no more crust formation and the patient was able to breathe very much better. In this case the sense of smell did not return.

The Treatment of Menieres Disease.—VERAGUTH (*Muenchener Medicinische Wochenschrift*, May 17, 1904).—Two cases of Menieres symptom-complex are reported by the author in which he obtained excellent results by galvanization. The first case was due to a luetic involvement of the labyrinth, and the second case was thought to have followed an attack of "grippe." The cathode was placed on the neck and the anode on the ear. In the first case the current was never above one and one-half m. a., while in the other case patient did not react until eight m. a. were given. The galvanizations were given daily for a period of four to six weeks, after which both patients were able to attend to their vocations.

Removal of the Semicircular Canals in a Case of Unilateral Aural Vertigo.—LAKE (*Lancet*, June 4, 1904).—The patient, a woman, aged twenty-one, had been the subject of aural vertigo combined with sickness and vomiting, with gradual increasing deafness and tinnitus for the past five years. In spite of all treatment the attacks grew worse and increased in frequency, until they occurred almost daily. On February 16, 1904, the patient was placed under a general anesthetic and the mastoid was opened in the ordinary way. The malleus and incus were removed. The semicircular canals were removed with a burr and a medium-sized opening was made into the vestibule. The wound was then closed by the ordinary methods. Considerable shock followed the operation and for the first forty-eight hours there was marked cerebral irritation. On the seventh day the patient sat up. From that time on she improved gradually until the fourth week, when she was able to do everything without danger of falling. There has been no return of the trouble and the patient enjoys better health than ever before.

Neuroses of Nasal Origin.—MAKUEN (*American Medicine*, June 4, 1904).—After briefly referring to a number of forms of neuroses that have been relieved by nasal operations the author states it is reasonable to suppose that, though not absolutely proven, some of the most serious mental and cerebral diseases may be of nasal origin. Many so-called nasal reflex neuroses may be explained on the theory of faulty respiration and impaired cerebral circulation due to direct intranasal pressure and the absorption of toxic catarrhal products through the blood and lymph. The writer holds that a careful examination of the nose is imperative in all doubtful cases of nervous disease.

A Consideration of Speech Defects.—BROWN (*Jour. A. M. A.*, May 28, 1904).—Speech defects are usually observed first between the ages of five and fifteen. Heredity has been proved to take little part in the etiology. Among the primary causes first observed in children are: fear, timidity, a fall or ill-treatment. Imitation lies at the bottom of many conditions, as in childhood this faculty seems to be more highly developed than at any other time. The modern authorities on this subject seem to consider the various causes that have been mentioned, but pay particular attention to abnormalities of the upper respiratory passages. Makuen is quoted as stating that whooping cough, measles, diphtheria, smallpox, and hereditary history of consumption and insanity are important causal factors. The same writer is also quoted as having reported cases which were due entirely to the presence of adenoids.

The continuous production of voice is the essential of speech. To accomplish this, a strong, unbroken stream of sound is necessary, and no mouth action should be allowed to interfere with the throat sound. There is no trick or particular method that is applicable in all cases. If possible the cause should first be ascertained, and then treatment instituted for ultimate relief. In many cases the main point to be remembered is the easy passage of air, with attention to proper placing of the voice, that being the material of speech, and should not be impeded in any way. Self-observation and control, eradication of spasmodic action, together with patience and perseverance, will in many instances permanently overcome the distressing, embarrassing impediment in speech.

OPHTHALMOLOGY.

IN CHARGE OF

JOHN GREEN, JR., M. D.

A Case of Recurrent Paralysis of the Third Nerve.—L. WERNER (*Ophthalm. Rev.*, May, 1904).—The patient, a twenty-year old unmarried country woman, had suffered since childhood with periodical attacks of headache and vomiting, lately occurring every month. The pain was of dull, heavy character and confined to the right frontal and temporal regions and right eye. Vision unaffected. No scotomata or flashes of light. Three years prior to coming under observation such an attack culminated in complete ptosis of the right eye. During the time the patient remained in bed (six weeks) there was a continuous slow dribbling of water from the mouth. Recovery was complete except that she has never regained the power of reading with the right eye. For two years she was free from eye symptoms when she began to see double and the ptosis reappeared. Recovery from the second attack was complete, but the "bilious" attacks continued.

Examination a year after the last attack showed some dilatation of the pupil and inability to read as the only symptoms. The personal and family history did not throw any light on her condition.

The pathology of the disease is still purely speculative. A lesion of the third nerve has been found in three or four of the periodically progressive cases (of which the present case is an example), but this of course fails to explain the other phenomena. Werner accounts for the symptom complex on the assumption of an accumulation of toxins in the system, either originating from gastro-intestinal derangements or introduced from without.

The Association of Cataract with Uncinariasis or Hookworm Disease.—A. W. CALHOUN (*Ophthalmic Record*, April, 1904).—Calhoun has observed the association of cataract with uncinariasis in five cases. Lens changes began six to twelve months after the appearance of the first symptoms of the general disease. In all cases the ova were found in the stools. Operation in a number of cases was followed by an uneventful recovery.

Some Guiding Principles of Ophthalmic Practice as Regards a Few of the Common External Diseases of the Eye.—D. T. VAIL (*The Cincinnati Lancet-Clinic*, May 21, 1904).—In hordeolum and acute chalazion, moist warm applications, frequently repeated for several days, should be followed by incision and evacuation with a small chalazion spoon. The patient should wear smoked glasses and wash the eyes frequently with a warm boric acid solution.

In marginal blepharitis, the dried formation along the lid margins should first be removed by soaking with hydrogen peroxide or warm soda bicarbonate solution, aided by gentle curettage. Nitrate of silver (10 per cent.) or a solution of carbolic acid is then applied. The patient

should use a solution of warm boric acid at home and apply to the lid margins a 1 per cent. yellow oxide ointment.

In acute conjunctivitis the cardinal principles are: gentle cleansing of the eyes externally, cold applications, the use of antiseptic drops, (boric acid, formalin, bichloride or argyrol) and the application of a mild ointment to the lid margins. Such measures are carried out by the patient at home. In addition silver nitrate solutions should be applied by the surgeon.

Abrasion of the cornea should be treated by a roller bandage after the conjunctival sack has been thoroughly cleansed with warm boric acid solution. It is often advantageous to insert a little vaseline. Cocaine is contraindicated as it unquestionably retards the healing of epithelium. A foreign body imbedded in the cornea should be removed as soon as possible. If an abrasion is present the case should be treated with a roller bandage.

In phlyctenular keratitis the blisters should be "wiped off" by means of a carrier wound with moistened absorbent cotton. Calomel should then be insufflated. If the base of the little ulcer be infected, silver nitrate or yellow oxide ointment should be used. Internal treatment is important.

In corneal ulcer the treatment will depend largely on the type. Should the ulcer show a tendency to spread, the application of pure carbolic acid or the actual cautery is indicated. In the superficial varieties the treatment suggested for phlyctenular keratitis is often successful.

A Case of Persistent Edema of the Eyelid Due to Syphilis.—E. F. SNY-DACKER (*Arch. of Ophthalm.*, March, 1904).—A mulatto, thirty-three years old, presented a painless edema of the left upper lid. It began four months previously and had gradually increased. The globe was unaffected and there was no diplopia.

The palpebral fissure was greatly narrowed, the lid overhanging the cornea, so that only the lower fourth of the latter was visible. The skin was red and very edematous. On palpation the infiltration appeared to be homogeneous and imparted a sense of doughlike resistance. The left preauricular gland and the cervical and epitrochlear glands were enlarged. The lachrymal gland could not be palpated. Lachrymal region not tender. The nose was normal. A history of syphilis seven years before was elicited.

Under mercurial inunctions and potassium iodide the edema disappeared entirely.

A search of the literature revealed only one other case presenting analogous symptoms. Snyderdacker believes that edema was due to a gummatous infiltration in the subcutaneous tissue. Another possible explanation is that there existed a tarsitis, the enlarged tarsus being masked by the palpebral edema. A luetic origin for a persistent edema of the lids should always be suspected.

SOCIETY PROCEEDINGS.

ST. LOUIS SURGICAL CLUB.

Meeting of January 8, 1904.

INTUSSUSCEPTION.

Dr. Charles H. Dixon read a paper with the above title, for which see page 414.

Dr. Jonas said he had been so fortunate as to see one of these cases in the Bethesda Hospital. Dr. Saunders had asked him to see the case just before Dr. Dixon saw it. He examined the young patient and found that the signs of obstruction had disappeared. In one of the later attacks Dr. Dixon operated on the patient. The speaker thought that of the symptoms of intussusception there were especially three symptoms important, of which the other symptoms were more or less the result, namely: absolute constipation, vomiting, and bloody evacuations. These three symptoms are the ones on which the diagnosis should be based. He thought Dr. Dixon was entirely correct in his statement that one should not expect to find a sausage-shaped tumor. These exist only in books. One of the methods of medicinal treatment used in Prof. Henoth's clinic in Berlin was the enema of ice water. The success sometimes following this treatment proved it to be of practical importance. If medicinal treatment is not successful, one of the following plans may be carried out, provided that at the operation reduction could not be accomplished: (1) Establishment of an artificial anus without resection. (2) Resection of the involved intestine and establishment of an artificial anus. (3) Resection of the involved intestine and end to end anastomosis. (4) The best method, however, is recommended by Barker, and has given the best results. The principle of the operation is the excision of the intussusceptum through a cut made in the intussusciens.

Dr. Willard Bartlett said there were two or three points of interest in connection with the pathological anatomy of the subject. The first was called to mind by the method of Baker, which was nothing more than an imitation of nature. In this process the gangrenous portion is sloughed completely off and passed. In one case, recently reported, there was a history of intussusception followed by the discharge of a slough, portions of which could be identified as being of the ileum, cecum and the angle of the ileocecal valve. In the etiology it is interesting to note that at the head of the column has been founded the inverted appendix. This brings to mind the suggestion of Dr. Baldwin, to invaginate the appendix. He says that if it is found impossible to invert the whole of the appendix, the mucosa may be invaginated. The gentleman had evidently not heard that that condition was one of the chief causes of intussusception. That fact should prevent the surgeon from ever trying to invaginate the appendix. Nearly an inch is invaginated in making the purse-string suture. It might be that enough is invaginated in the little that is turned in to cause trouble. To avoid this, after ligating the mesentery of the appendix, tie this ligature to the purse-string suture. This is done by Dr. Will J. Mayo, and it would certainly seem to have some tendency to keep the gut from invaginating itself into the colon.

Dr. V. P. Blair said that he had noticed in some journal an account of an experiment that was interesting in this connection. The abdomen of a rabbit was opened and bicarbonate of soda, or some other irritant, was placed on the peritoneal surface, producing intussusception. It had always struck him as peculiar that after a resection

there is no intussusception. He had recently examined a case in which the diagnosis was doubtful. Tucked away under the liver there was found a tumor, but he was satisfied that it was the head of the pancreas, after careful examination. They finally decided that it was a case of entero-colitis, and the child got well. He had seen one similar case in which the child had been taking large doses of bismuth for forty-eight hours, and the stools were not blackened. That is one of the symptoms in cases of obstruction where bismuth has been given.

He had recently seen an account of a case in which the child fell asleep while waiting for the surgeon to come, and the symptoms of intussusception disappeared before his arrival. He did not understand Dr. Dixon's statement that a wait of two and a half days would usually raise the mortality from 50 to 100 per cent., because it was understood that those cases usually cured themselves. It is the general teaching among the English pathologists that almost all extensive colics in infants are due to intussusception.

Dr. Dixon, in closing, said that when intussusception lasts over two and a half days gangrene is likely to supervene, and the minute it does, the mortality goes up from 50 to 100 per cent. As to Barker's method, it is an imitation of nature. He puts in first a Lembert suture at the site of the invagination, then, after incising the gut near the invagination, draws out and cuts off the invaginated portion, then closing the incision. The mortality of the operation has been very much lessened. Making traction on the gut in reducing the invagination is wrong. No traction whatever should be made on the gut. The minute traction is produced on the proximal end the constriction is increased. That is why the gut often gives way at the point of constriction. If, on the other hand, the gut is taken at the distal end and pressure made upon it at that point, it will unfold. Distention by water does the same thing that the hand does, but the method is bad because one does not know the condition of the gut.

BOOK REVIEWS.

SCHMERZVERMINDERUNG UND NARKOSE IN DER GEBURTSHILFE, mit specieller Beruecksichtigung der Combinirten Scopolamin-Morphium Narkose. Von DR. RICHARD VON STEINBUECHEL. Verlag von Franz Deuticke in Wien. 1903. Price, \$1.00.

The Egyptians, the Greeks, the Chinese and Japanese, many centuries ago, endeavored to relieve the sufferings of the parturient woman by the use of certain narcotic substances, but it is only of late that systematic efforts have been made to give to women in labor the benefit of our advanced knowledge in the administration of narcotics and anesthetics. The author gives in this monograph a historical resume of the use of drugs during labor, and considers critically all the various methods used at the present day. A considerable part of this essay is devoted to a detailed report of the writer's experience with the scopolamin-morphine anesthesia, first suggested by Schneiderlein in 1900. His results with hypodermic injections containing 0.01 gram of morphiun muriaticum and 0.0003 to 0.0004 gram of scopolaminum hydrobromicum are very satisfactory. The consciousness of the patient remains undisturbed by the use of this dose, but her sensibility is reduced to such a degree that almost all the obstetrical operations can be performed without difficulty. There is no interference with the normal progress of labor, no perceptible danger to either mother or child. The writer concludes this very interesting essay with a plea for a wider use in obstetrical work of the scopolamin-morphine anesthesia.

THE LYMPHATICS. General Anatomy of the Lymphatics. By G. DELAMARE. Special Study of the Lymphatics in Different Parts of the Body, by P. Porier and B. Cuneo. Authorized English Edition, translated and edited by Cecil H. Leaf, London. With 117 Illustrations and Diagrams. Chicago: W. T. Keener & Co., 90 Wabash ave. 1904.

This volume of 300 pages forms a section of the Treatise of Human Anatomy edited by P. Porier and A. Charpy. It is divided into two parts. The first, dealing with the general anatomy of the lymphatic system, is written by Delamare. This part contains a complete and most comprehensive consideration of the form elements of lymph and of the anatomy of lymph glands and lymph vessels. The second part is devoted to a study of the lymphatics in the different regions of the body, and is written by Porier and Cuneo. The names of these authors are sufficient guarantee of the care and accuracy bestowed on their respective subjects.

With the steadily growing interest of the profession in the vexing cancer problem, a thorough knowledge of the histology and function of the lymph, and especially of the arrangement and distribution of lymphatic vessels and glands, becomes more and more essential every day. In both these subjects the present work considerably extends our knowledge. Its careful perusal is emphatically recommended to every surgeon and gynecologist.

THE LAW IN ITS RELATION TO THE PHYSICIAN. By ARTHUR N. TAYLOR, LL. B., of the New York Bar. D. Appleton & Co., New York. 1904.

That portion of the field commonly known as medical jurisprudence has received the attention of many able writers, with the result that nearly every question of law requiring elucidation as to its medical aspects has been worked out and is accessible to the lawyer. Singularly neglected, however, in the writer's opinion, is that portion of the field which relates to the needs of the physician. He is left without reliable information regarding his legal rights and liabilities, and, therefore, the author has attempted to place in this work, within the reach of every physician, a systematic treatment of those questions of law which present themselves most frequently in his professional work.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., assisted by H. R. M. LANDIS, M. D. Volume II. June, 1904. Lea Brothers & Co., Philadelphia. Six dollars per annum.

This volume contains the following articles: Surgery of the Abdomen, Including Hernia, by William B. Coley; Gynecology, by John G. Clark; Diseases of the Blood; Diabetic and Metabolic Diseases, Diseases of the Spleen, Thyroid Gland and Lymphatic System, by Alfred Stengel, and Ophthalmology, by Edward Jackson.

As usual, the articles are not mere abstracts, but monographs, which carefully consider the world's literature. The department of pathology, which was missing in the March volume, is still outstanding. We trust that the publishers do not really intend to omit this important part of their publication.

TECHNIQUE DU TRAITEMENT DE LA COXALGIE. Par le DR. CALOT, Paris, Masson et Cie, Paris.

The subject of hip disease is thoroughly covered from early diagnosis to convalescence. There is little in the book that is new to the American surgeon, especially if he be interested in orthopedic work, but the careful arrangement of the book, the definite reference to all the small details of treatment, and the illumination that the 178 illustrations throw upon the text, make the book a valuable possession.

Of particular interest is the chapter on the application of plaster spica bandage to acute hips for ambulatory treatment. Instructions are also given in another chapter as to the making of the celluloid spica.

On the operative treatment, a good deal of importance is given to aspiration of abscess. The technique is given in minute detail. The various forms of osteotomy are described, as is also resection of the joint.

LEHRBUCH DER GEBURTSHILFE FUER AERZTE UND STUDIERENDE, VON DR. PAUL ZWEIFEL, Professor der Universitaet, Leipzig. Fuenfte, vollstaendig umgearbeitete Auflage, mit 237 Abbildungen im Texte. Verlag von Ferdinand Enke in Stuttgart. 1903. Preis: Mk. 14.

Zweifel's well known text-book on obstetrics has just appeared in its fifth edition. In order to bring this book up to date the author has practically rewritten the volume. Thus it represents in its new form a concise but complete expose of the present status of obstetrics. The exceedingly rational arrangement of the text matter makes it an ideal text-book for the student. Its thoroughness renders it most valuable as a reference book for the practitioner.

WUERZBURGER ABHANDLUGEN AUS DEM GESAMTGEBIET DER PRAKTISCHEN MEDIZIN. Herausgegeben VON PROF. JOH. MUELLER und PROF. DR. OTTO SEIFERT. Verlag von A. Stuber, in Wuerzburg. 12 Hefte jaehrlich. Preis: Mk. 7.50. G. E. Stechert, New York.

This publication consists of independent monographs which appear monthly. They are written by eminent teachers of German universities, each presenting a clear resume of the present status of an interesting medical topic.

Volume III contains the following essays:

"Intestinal Diseases of the Nursling," by Trumpp; "Diseases of the Myocardium," by Gerhardt; "Orogenous Diseases of the Brain," by Brieger; "Use of the Colpeurynter in Obstetrical and Gynecological Practice," by Bollenhagen; "Treatment of Internal Hemorrhages with Special Consideration of Gelatine," by Boltensern; "Post Partum Hemorrhages," by Burekhardt; "Bronchial Asthma," by Schmidt; "Diseases of the Esophagus," by Starck; "Indications for Surgical Interference in Gastric Injuries and

Diseases," by Burckhardt; "Deafness and Dumbness," by Maas, and "Treatment of Tuberculous Joints in Childhood," by Hoffa.

The following monographs of Volume IV have appeared:

"Diseases of the Rectum," by Schmidt; "Serum-Diagnosis," by Rostoski; "Clinical Significance of Gastro Intestinal Meteorismus," by Stein; "Sclerosis and Atheromatosis of the Arteries," by Geigel, and "Prevention of Insanity," by Weygandt. An abstract of this last monograph can be found in the June number of this journal.

MANUAL OF DISEASES OF THE EYE. For Students and General Practitioners. By CHAS. H. MAY, M. D., Late Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York, etc. Third edition, revised. With 275 original illustrations, including 16 plates with 36 colored figures. New York: William Wood & Company. 1903. 12mo, 410 pages.

May's well-known manual, which has now reached a third edition, hardly needs an introduction to the student of contemporary ophthalmic literature. It is comparable neither to the inadequate quiz-compend, nor to the extended treatise, but occupies a position between these two. The problem of determining what to include and what to omit in a book of such limited dimensions (408 pages) has been solved by the author, whose long teaching experience has given him an admirable sense of the proper emphasis to apply to the various topics of his subject. Dr. May has succeeded in presenting the greatest number of facts in the least number of words consistent with clearness.

The illustrations, which are for the most part original, have been drawn without unnecessary detail. Special mention should be made of the excellence of plates II and III, depicting the proper method of everting the upper and lower lids, and of plate IX, illustrating the method of applying the copper crayon and the operation of expression in trachoma.

Plate IV, illustrating in colors the examination of the media by oblique illumination and ophthalmoscope, will give the student a fairly adequate conception of the appearance of the different forms of corneal and lenticular opacity under these methods of examination.

The work has attained the unusual distinction of being translated into German.

A DICTIONARY OF MEDICAL SCIENCE. Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Bacteriology. Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence, Dentistry, Veterinary Science, etc., by ROBLEY DUNGLISON, M. D., LL. D., late Professor of Institutes of Medicine in the Jefferson Medical College of Philadelphia. New (twenty-third) edition, thoroughly revised, with the pronunciation, accentuation and derivation of the terms, by THOMAS L. STEDMAN, A. M., M. D., Member of the New York Academy of Medicine. In one volume of 1,224 pages, with about 600 illustrations, including 85 full-page plates, with thumb-letter index. Cloth, \$8.00, net. Lea Brothers & Co., Philadelphia and New York.

The twenty-third edition of Dunglison's Dictionary retains all of the good features that this work has always possessed and contains all that a medical dictionary can hold of information necessary for the definition of medical terms. As the editor says in his preface, "it is not expected to fill a long felt want, for its existence has obviated

the possibility of such a want." The addition of a thumb-letter index is a great convenience.

A PRACTICAL TREATISE ON NERVOUS DISEASES. By F. SAVARY PEARCE.
D. Appleton and Company, New York and London.

This is a small treatise by the late Dr. Pearce. It is designed for students and general practitioners. A short work of this kind always presents points for criticism. The brevity of the descriptions naturally leaves many important points untouched and others unduly exaggerated, in this respect this is common with other books of the same class shares.

EPILEPSY AND ITS TREATMENT. By WILLIAM P. STRATLING, M. D.,
Superintendent of the Craig Colony for Epileptics at Sonyea, N. Y.
Handsome octavo volume of 522 pages, illustrated. Philadelphia,
New York, London. W. B. Saunders & Company. 1904. Cloth,
\$4.00 net.

This treatise on epilepsy is bound to be received with favor by those whose work brings them in constant relation with the many varieties of this disease. Its special features are the unusual material upon which it is chiefly based and the attempt which is made to furnish a pathology for the disease derived from a study of post-mortem material of status epilepticus. There are some other features which deserve attention. The chapter on the results of surgical treatment in traumatic and other forms of the disease is one of the most instructive. The consideration of auras is an index to the broad spirit in which the book was conceived. There is included among the chapters devoted to treatment one on the relief of eye strain in the lessening or the cure of epilepsy. The extravagant claims of some oculists in this respect are here refuted and the refutation is embodied in a permanent form, for Gould was given an opportunity to test his theory on the material of the Craig colony, of which the author was the medical director. The absolutely false premises on which this theory of the causation of epilepsy was based, it is to be hoped, receives here its final condemnation. It may be questioned whether the chapter on the surgical treatment of epilepsy might not well have been omitted as the pure surgical details have no special interest for the readers of this sort of a book. As an authoritative exposition of our present knowledge of epilepsy set down in attractive and readable way the work of Spratling can be strongly recommended.

A TEXT-BOOK OF MODERN MATERIA MEDICA AND THERAPEUTICS. By A. A. STEVENS, A. M., M. D., Lecturer on Physical Diagnosis in the University of Pennsylvania; Physician to the Episcopal and St. Agnes Hospitals, Philadelphia. Third edition, greatly enlarged, rewritten, and reset. Handsome octavo of 663 pages. W. B. Saunders & Company. 1903. Cloth, \$3.50 net.

Since the appearance of the last edition of this book such rapid advances have been made in materia medica, therapeutics and the allied sciences, that the author has wisely rewritten the entire work. He has altered the general plan of the book considerably, and instead of considering the drugs in alphabetical order, as in the previous editions, he has classified them according to their pharmacologic action. This arrangement, notwithstanding the present unsettled state of pharmacology, possesses certain advantages in that it aids the student to correlate established facts, and to apply them more readily to the treatment of disease.

The part devoted to therapeutics has evidently undergone a thorough revision; and we note that all the newer remedies which have been shown by the competent observers to possess real merit and to be worthy of a more extended trial at the hands of the profession have been considered.